COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
AIR QUALITY PROGRAM

TITLE V/STATE OPERATING PERMIT

Issue Date:	March 2, 2020	Effective Date:	August 3, 2023
Revision Date:	August 3, 2023	Expiration Date:	March 2, 2025
Revision Type:	Modification, Significant		

In accordance with the provisions of the Air Pollution Control Act, the Act of January 8, 1960, P.L. 2119, as amended, and 25 Pa. Code Chapter 127, the Owner, [and Operator if noted] (hereinafter referred to as permittee) identified below is authorized by the Department of Environmental Protection (Department) to operate the air emission source(s) more fully described in this permit. This Facility is subject to all terms and conditions specified in this permit. Nothing in this permit relieves the permittee from its obligations to comply with all applicable Federal, State and Local laws and regulations.

The regulatory or statutory authority for each permit condition is set forth in brackets. All terms and conditions in this permit are federally enforceable applicable requirements unless otherwise designated as "State-Only" or "non-applicable" requirements.

TITLE V Permit No: 23-00012

Federal Tax Id - Plant Code: 25-1534498-1

Owner Information

Name: BRASKEM AMER INC
Mailing Address: 750 W 10TH ST
MARCUS HOOK, PA 19061-4500

Plant Information

Plant: BRASKEM AMER INC/MARCUS HOOK
Location: 23 Delaware County 23825 Marcus Hook Borough
SIC Code: 2821 Manufacturing - Plastics Materials And Resins

Responsible Official

Name: DARYL LEGGETT
Title: FAC MGR
Phone: (610) 497 - 8850 Email: daryl.leggett@braskem.com

Permit Contact Person

Name: JEFFREY HIRT
Title: LEAD ENV ENGR
Phone: (610) 497 - 8229 Email: jeffrey.hirt@braskem.com

[Signature] _____
JAMES D. REBARCHAK, SOUTHEAST REGION AIR PROGRAM MANAGER

SECTION A. Table of Contents

Section A. Facility/Source Identification

Section B. General Title V Requirements

Section C. Site Level Title V Requirements

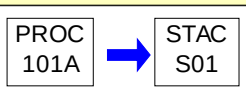
Section D. Source Level Title V Requirements

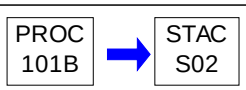
SECTION A. Table of Contents

SECTION A. Site Inventory List

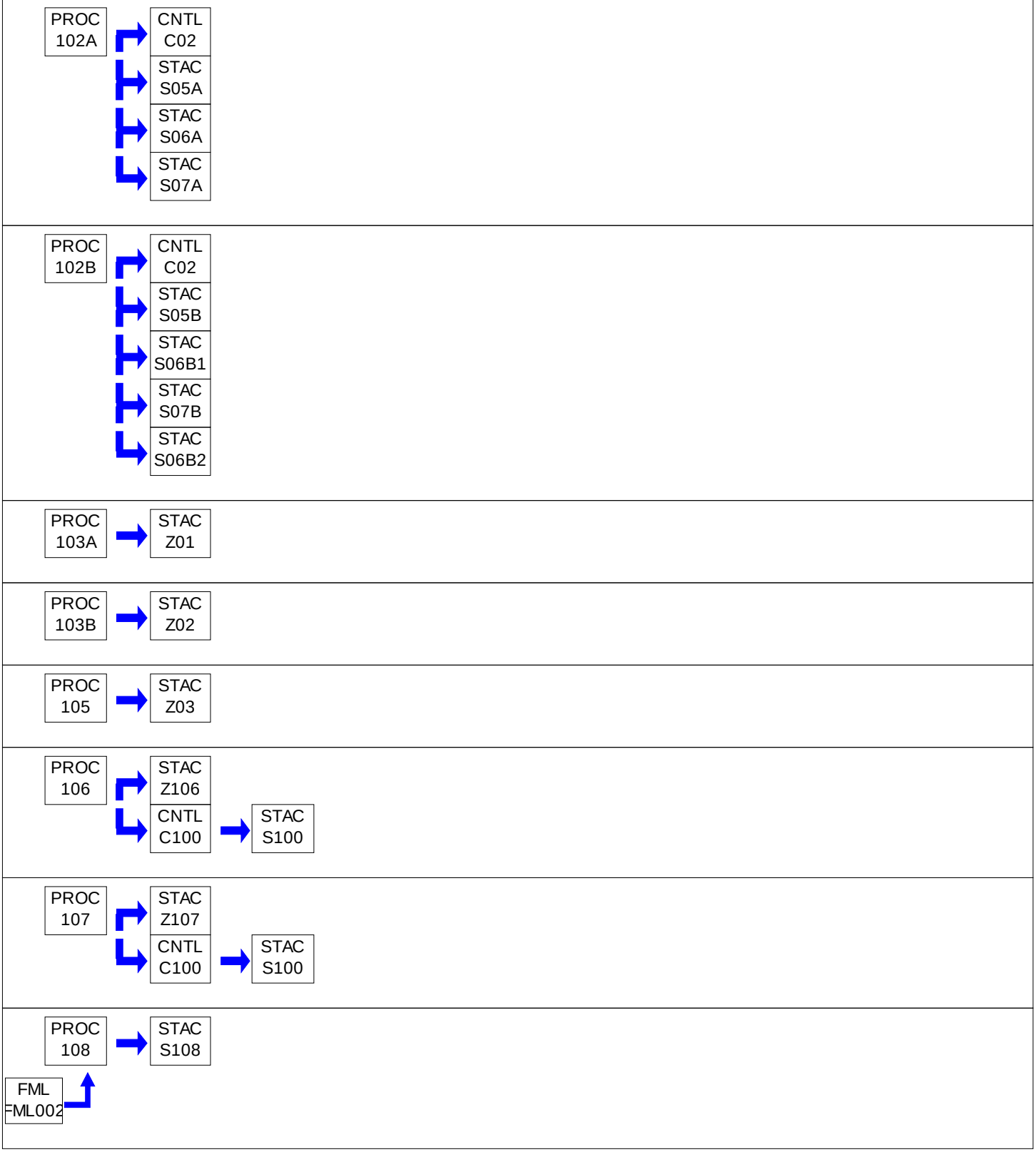
Source ID	Source Name	Capacity/Throughput	Fuel/Material
101A	PLANT 1, THREE STORAGE SILOS	N/A	polypropylene pellets
101B	PLANT 2, THREE STORAGE SILOS	N/A	polypropylene pellets
102A	PLANT 1 POLYPROPYLENE MFG SOURCES	N/A	Prop & Ethylene
102B	PLANT 2 POLYPROPYLENE MFG SOURCES	N/A	prop & ethylene
103A	PLANT 1 FUGITIVE SOURCES	N/A	fugitives
103B	PLANT 2 FUGITIVE SOURCES	N/A	fugitives
105	MAINTENANCE PARTS WASHER		
106	PROPYLENE SPLITTER PROCESS & CAVERN 4	N/A	
107	PROPYLENE UNLOADING RACK	N/A	
108	FIRE WATER PUMP ENGINES		
C02	FLARE SYSTEM (STEAM-ASSISTED)	N/A	
C100	SUNOCO FLARE		
FML002	DIESEL TANKS (2) FOR FIRE PUMP ENGINES		
S01	PLANT 1 STACK (SILO EXHAUST)		
S02	PLANT 2 STACK (SILO EXHAUST)		
S05A	ADDITIVE BLENDER BAGHOUSE STACK (PLANT 1)		
S05B	ADDITIVE BLENDER BAGHOUSE STACK (PLANT 2)		
S06A	EXTRUDER BAGHOUSE VENT STACK (PLANT 1)		
S06B1	EXTRUDER BAGHOUSE VENT STACK I (PLANT 2)		
S06B2	EXTRUDER BAGHOUSE VENT STACK II (PLANT 2)		
S07A	ELUTRIATOR BAGHOUSE VENT STACK (PLANT 1)		
S07B	ELUTRIATOR BAGHOUSE VENT STACK (PLANT 2)		
S100	SUNOCO FLARE STACK		
S108	FIRE WATER PUMP ENGINES STACK		
Z01	PLANT 1 FUGITIVES		
Z02	PLANT 2 FUGITIVES		
Z03	FUGITIVE EMISSIONS FROM PARTS WASHER		
Z106	PROPYLENE SPLITTER PROCESS & CAVERN 4 FUGITIVES		
Z107	PROPYLENE LOADING RACK FUGITIVES		

PERMIT MAPS





PERMIT MAPS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STAC S06A
STAC S07A
PROC 102B
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STAC S06B2
PROC 103A
STAC Z01
PROC 103B
STAC Z02
PROC 105
STAC Z03
PROC 106
STAC Z106
CNTL C100
STAC S100
PROC 107
STAC Z107
CNTL C100
STAC S100
PROC 108
STAC S108
FML FML002

SECTION B. General Title V Requirements

#001 [25 Pa. Code § 121.1]

Definitions

Words and terms that are not otherwise defined in this permit shall have the meanings set forth in Section 3 of the Air Pollution Control Act (35 P.S. § 4003) and 25 Pa. Code § 121.1.

#002 [25 Pa. Code § 121.7]

Prohibition of Air Pollution

No person may permit air pollution as that term is defined in the act.

#003 [25 Pa. Code § 127.512(c)(4)]

Property Rights

This permit does not convey property rights of any sort, or any exclusive privileges.

#004 [25 Pa. Code § 127.446(a) and (c)]

Permit Expiration

This operating permit is issued for a fixed term of five (5) years and shall expire on the date specified on Page 1 of this permit. The terms and conditions of the expired permit shall automatically continue pending issuance of a new Title V permit, provided the permittee has submitted a timely and complete application and paid applicable fees required under 25 Pa. Code Chapter 127, Subchapter I and the Department is unable, through no fault of the permittee, to issue or deny a new permit before the expiration of the previous permit. An application is complete if it contains sufficient information to begin processing the application, has the applicable sections completed and has been signed by a responsible official.

#005 [25 Pa. Code §§ 127.412, 127.413, 127.414, 127.446(e), 127.503 & 127.704(b)]

Permit Renewal

(a) An application for the renewal of the Title V permit shall be submitted to the Department at least six (6) months, and not more than 18 months, before the expiration date of this permit. The renewal application is timely if a complete application is submitted to the Department's Regional Air Manager within the timeframe specified in this permit condition.

(b) The application for permit renewal shall include the current permit number, the appropriate permit renewal fee, a description of any permit revisions and off-permit changes that occurred during the permit term, and any applicable requirements that were promulgated and not incorporated into the permit during the permit term. The fees shall be made payable to "The Commonwealth of Pennsylvania Clean Air Fund" and submitted with the fee form to the respective regional office.

(c) The renewal application shall also include submission of proof that the local municipality and county, in which the facility is located, have been notified in accordance with 25 Pa. Code § 127.413. The application for renewal of the Title V permit shall also include submission of compliance review forms which have been used by the permittee to update information submitted in accordance with either 25 Pa. Code § 127.412(b) or § 127.412(j).

(d) The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information during the permit renewal process. The permittee shall also promptly provide additional information as necessary to address any requirements that become applicable to the source after the date a complete renewal application was submitted but prior to release of a draft permit.

#006 [25 Pa. Code §§ 127.450(a)(4) & 127.464(a)]

Transfer of Ownership or Operational Control

(a) In accordance with 25 Pa. Code § 127.450(a)(4), a change in ownership or operational control of the source shall be treated as an administrative amendment if:

(1) The Department determines that no other change in the permit is necessary;

(2) A written agreement has been submitted to the Department identifying the specific date of the transfer of permit responsibility, coverage and liability between the current and the new permittee; and,

(3) A compliance review form has been submitted to the Department and the permit transfer has been approved by

SECTION B. General Title V Requirements

the Department.

(b) In accordance with 25 Pa. Code § 127.464(a), this permit may not be transferred to another person except in cases of transfer-of-ownership which are documented and approved to the satisfaction of the Department.

#007 [25 Pa. Code § 127.513, 35 P.S. § 4008 and § 114 of the CAA]

Inspection and Entry

(a) Upon presentation of credentials and other documents as may be required by law for inspection and entry purposes, the permittee shall allow the Department of Environmental Protection or authorized representatives of the Department to perform the following:

(1) Enter at reasonable times upon the permittee's premises where a Title V source is located or emissions related activity is conducted, or where records are kept under the conditions of this permit;

(2) Have access to and copy or remove, at reasonable times, records that are kept under the conditions of this permit;

(3) Inspect at reasonable times, facilities, equipment including monitoring and air pollution control equipment, practices, or operations regulated or required under this permit;

(4) Sample or monitor, at reasonable times, substances or parameters, for the purpose of assuring compliance with the permit or applicable requirements as authorized by the Clean Air Act, the Air Pollution Control Act, or the regulations promulgated under the Acts.

(b) Pursuant to 35 P.S. § 4008, no person shall hinder, obstruct, prevent or interfere with the Department or its personnel in the performance of any duty authorized under the Air Pollution Control Act.

(c) Nothing in this permit condition shall limit the ability of the EPA to inspect or enter the premises of the permittee in accordance with Section 114 or other applicable provisions of the Clean Air Act.

#008 [25 Pa. Code §§ 127.25, 127.444, & 127.512(c)(1)]

Compliance Requirements

(a) The permittee shall comply with the conditions of this permit. Noncompliance with this permit constitutes a violation of the Clean Air Act and the Air Pollution Control Act and is grounds for one (1) or more of the following:

(1) Enforcement action

(2) Permit termination, revocation and reissuance or modification

(3) Denial of a permit renewal application

(b) A person may not cause or permit the operation of a source, which is subject to 25 Pa. Code Article III, unless the source(s) and air cleaning devices identified in the application for the plan approval and operating permit and the plan approval issued to the source are operated and maintained in accordance with specifications in the applications and the conditions in the plan approval and operating permit issued by the Department. A person may not cause or permit the operation of an air contamination source subject to 25 Pa. Code Chapter 127 in a manner inconsistent with good operating practices.

(c) For purposes of Sub-condition (b) of this permit condition, the specifications in applications for plan approvals and operating permits are the physical configurations and engineering design details which the Department determines are essential for the permittee's compliance with the applicable requirements in this Title V permit.

#009 [25 Pa. Code § 127.512(c)(2)]

Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

SECTION B. General Title V Requirements

#010 [25 Pa. Code §§ 127.411(d) & 127.512(c)(5)]

Duty to Provide Information

(a) The permittee shall furnish to the Department, within a reasonable time, information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit.

(b) Upon request, the permittee shall also furnish to the Department copies of records that the permittee is required to keep by this permit, or for information claimed to be confidential, the permittee may furnish such records directly to the Administrator of EPA along with a claim of confidentiality.

#011 [25 Pa. Code §§ 127.463, 127.512(c)(3) & 127.542]

Reopening and Revising the Title V Permit for Cause

(a) This Title V permit may be modified, revoked, reopened and reissued or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay a permit condition.

(b) This permit may be reopened, revised and reissued prior to expiration of the permit under one or more of the following circumstances:

(1) Additional applicable requirements under the Clean Air Act or the Air Pollution Control Act become applicable to a Title V facility with a remaining permit term of three (3) or more years prior to the expiration date of this permit. The Department will revise the permit as expeditiously as practicable but not later than 18 months after promulgation of the applicable standards or regulations. No such revision is required if the effective date of the requirement is later than the expiration date of this permit, unless the original permit or its terms and conditions has been extended.

(2) Additional requirements, including excess emissions requirements, become applicable to an affected source under the acid rain program. Upon approval by the Administrator of EPA, excess emissions offset plans for an affected source shall be incorporated into the permit.

(3) The Department or the EPA determines that this permit contains a material mistake or inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit.

(4) The Department or the Administrator of EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

(c) Proceedings to revise this permit shall follow the same procedures which apply to initial permit issuance and shall affect only those parts of this permit for which cause to revise exists. The revision shall be made as expeditiously as practicable.

(d) Regardless of whether a revision is made in accordance with (b)(1) above, the permittee shall meet the applicable standards or regulations promulgated under the Clean Air Act within the time frame required by standards or regulations.

#012 [25 Pa. Code § 127.543]

Reopening a Title V Permit for Cause by EPA

As required by the Clean Air Act and regulations adopted thereunder, this permit may be modified, reopened and reissued, revoked or terminated for cause by EPA in accordance with procedures specified in 25 Pa. Code § 127.543.

#013 [25 Pa. Code § 127.522(a)]

Operating Permit Application Review by the EPA

The applicant may be required by the Department to provide a copy of the permit application, including the compliance plan, directly to the Administrator of the EPA. Copies of title V permit applications to EPA, pursuant to 25 PA Code §127.522(a), shall be submitted, if required, to the following EPA e-mail box:

R3_Air_Apps_and_Notices@epa.gov

Please place the following in the subject line: TV [permit number], [Facility Name].

SECTION B. General Title V Requirements

#014 [25 Pa. Code § 127.541]

Significant Operating Permit Modifications

When permit modifications during the term of this permit do not qualify as minor permit modifications or administrative amendments, the permittee shall submit an application for significant Title V permit modifications in accordance with 25 Pa. Code § 127.541. Notifications to EPA, pursuant to 25 PA Code §127.522(a), if required, shall be submitted, to the following EPA e-mail box:

R3_Air_Apps_and_Notices@epa.gov

Please place the following in the subject line: TV [permit number], [Facility Name].

#015 [25 Pa. Code §§ 121.1 & 127.462]

Minor Operating Permit Modifications

The permittee may make minor operating permit modifications (as defined in 25 Pa. Code §121.1), on an expedited basis, in accordance with 25 Pa. Code §127.462 (relating to minor operating permit modifications). Notifications to EPA, pursuant to 25 PA Code §127.462(c), if required, shall be submitted, to the following EPA e-mail box:

R3_Air_Apps_and_Notices@epa.gov

Please place the following in the subject line: TV [permit number], [Facility Name].

#016 [25 Pa. Code § 127.450]

Administrative Operating Permit Amendments

(a) The permittee may request administrative operating permit amendments, as defined in 25 Pa. Code §127.450(a). Copies of request for administrative permit amendment to EPA, pursuant to 25 PA Code §127.450(c)(1), if required, shall be submitted to the following EPA e-mail box:

R3_Air_Apps_and_Notices@epa.gov

Please place the following in the subject line: TV [permit number], [Facility Name].

(b) Upon final action by the Department granting a request for an administrative operating permit amendment covered under §127.450(a)(5), the permit shield provisions in 25 Pa. Code § 127.516 (relating to permit shield) shall apply to administrative permit amendments incorporated in this Title V Permit in accordance with §127.450(c), unless precluded by the Clean Air Act or the regulations thereunder.

#017 [25 Pa. Code § 127.512(b)]

Severability Clause

The provisions of this permit are severable, and if any provision of this permit is determined by the Environmental Hearing Board or a court of competent jurisdiction, or US EPA to be invalid or unenforceable, such a determination will not affect the remaining provisions of this permit.

#018 [25 Pa. Code §§ 127.704, 127.705 & 127.707]

Fee Payment

(a) The permittee shall pay fees to the Department in accordance with the applicable fee schedules in 25 Pa. Code Chapter 127, Subchapter I (relating to plan approval and operating permit fees). The applicable fees shall be made payable to "The Commonwealth of Pennsylvania Clean Air Fund" with the permit number clearly indicated and submitted to the respective regional office.

(b) Emission Fees. The permittee shall, on or before September 1st of each year, pay applicable annual Title V emission fees for emissions occurring in the previous calendar year as specified in 25 Pa. Code § 127.705. The permittee is not required to pay an emission fee for emissions of more than 4,000 tons of each regulated pollutant emitted from the facility.

(c) As used in this permit condition, the term "regulated pollutant" is defined as a VOC, each pollutant regulated under Sections 111 and 112 of the Clean Air Act and each pollutant for which a National Ambient Air Quality Standard has been promulgated, except that carbon monoxide is excluded.

SECTION B. General Title V Requirements

(d) Late Payment. Late payment of emission fees will subject the permittee to the penalties prescribed in 25 Pa. Code § 127.707 and may result in the suspension or termination of the Title V permit. The permittee shall pay a penalty of fifty percent (50%) of the fee amount, plus interest on the fee amount computed in accordance with 26 U.S.C.A. § 6621(a)(2) from the date the emission fee should have been paid in accordance with the time frame specified in 25 Pa. Code § 127.705(c).

(e) The permittee shall pay an annual operating permit maintenance fee according to the following fee schedule established in 25 Pa. Code § 127.704(d) on or before December 31 of each year for the next calendar year.

(1) Eight thousand dollars ($8,000) for calendar years 2021—2025.

(2) Ten thousand dollars ($10,000) for calendar years 2026—2030.

(3) Twelve thousand five hundred dollars ($12,500) for the calendar years beginning with 2031.

#019 [25 Pa. Code §§ 127.14(b) & 127.449]

Authorization for De Minimis Emission Increases

(a) This permit authorizes de minimis emission increases from a new or existing source in accordance with 25 Pa. Code §§ 127.14 and 127.449 without the need for a plan approval or prior issuance of a permit modification. The permittee shall provide the Department with seven (7) days prior written notice before commencing any de minimis emissions increase that would result from either: (1) a physical change of minor significance under § 127.14(c)(1); or (2) the construction, installation, modification or reactivation of an air contamination source. The written notice shall:

(1) Identify and describe the pollutants that will be emitted as a result of the de minimis emissions increase.

(2) Provide emission rates expressed in tons per year and in terms necessary to establish compliance consistent with any applicable requirement.

The Department may disapprove or condition de minimis emission increases at any time.

(b) Except as provided below in (c) and (d) of this permit condition, the permittee is authorized during the term of this permit to make de minimis emission increases (expressed in tons per year) up to the following amounts without the need for a plan approval or prior issuance of a permit modification:

(1) Four tons of carbon monoxide from a single source during the term of the permit and 20 tons of carbon monoxide at the facility during the term of the permit.

(2) One ton of NOx from a single source during the term of the permit and 5 tons of NOx at the facility during the term of the permit.

(3) One and six-tenths tons of the oxides of sulfur from a single source during the term of the permit and 8.0 tons of oxides of sulfur at the facility during the term of the permit.

(4) Six-tenths of a ton of PM10 from a single source during the term of the permit and 3.0 tons of PM10 at the facility during the term of the permit. This shall include emissions of a pollutant regulated under Section 112 of the Clean Air Act unless precluded by the Clean Air Act or 25 Pa. Code Article III.

(5) One ton of VOCs from a single source during the term of the permit and 5.0 tons of VOCs at the facility during the term of the permit. This shall include emissions of a pollutant regulated under Section 112 of the Clean Air Act unless precluded by the Clean Air Act or 25 Pa. Code Article III.

(c) In accordance with § 127.14, the permittee may install the following minor sources without the need for a plan approval:

(1) Air conditioning or ventilation systems not designed to remove pollutants generated or released from other sources.

(2) Combustion units rated at 2,500,000 or less Btu per hour of heat input.

SECTION B. General Title V Requirements

(3) Combustion units with a rated capacity of less than 10,000,000 Btu per hour heat input fueled by natural gas supplied by a public utility, liquefied petroleum gas or by commercial fuel oils which are No. 2 or lighter, viscosity less than or equal to 5.82 c St, and which meet the sulfur content requirements of 25 Pa. Code § 123.22 (relating to combustion units). For purposes of this permit, commercial fuel oil shall be virgin oil which has no reprocessed, recycled or waste material added.

(4) Space heaters which heat by direct heat transfer.

(5) Laboratory equipment used exclusively for chemical or physical analysis.

(6) Other sources and classes of sources determined to be of minor significance by the Department.

(d) This permit does not authorize de minimis emission increases if the emissions increase would cause one or more of the following:

(1) Increase the emissions of a pollutant regulated under Section 112 of the Clean Air Act except as authorized in Subparagraphs (b)(4) and (5) of this permit condition.

(2) Subject the facility to the prevention of significant deterioration requirements in 25 Pa. Code Chapter 127, Subchapter D and/or the new source review requirements in Subchapter E.

(3) Violate any applicable requirement of the Air Pollution Control Act, the Clean Air Act, or the regulations promulgated under either of the acts.

(4) Changes which are modifications under any provision of Title I of the Clean Air Act and emission increases which would exceed the allowable emissions level (expressed as a rate of emissions or in terms of total emissions) under the Title V permit.

(e) Unless precluded by the Clean Air Act or the regulations thereunder, the permit shield described in 25 Pa. Code § 127.516 (relating to permit shield) shall extend to the changes made under 25 Pa. Code § 127.449 (relating to de minimis emission increases).

(f) Emissions authorized under this permit condition shall be included in the monitoring, recordkeeping and reporting requirements of this permit.

(g) Except for de minimis emission increases allowed under this permit, 25 Pa. Code § 127.449, or sources and physical changes meeting the requirements of 25 Pa. Code § 127.14, the permittee is prohibited from making physical changes or engaging in activities that are not specifically authorized under this permit without first applying for a plan approval. In accordance with § 127.14(b), a plan approval is not required for the construction, modification, reactivation, or installation of the sources creating the de minimis emissions increase.

(h) The permittee may not meet de minimis emission threshold levels by offsetting emission increases or decreases at the same source.

#020 [25 Pa. Code §§ 127.11a & 127.215]

Reactivation of Sources

(a) The permittee may reactivate a source at the facility that has been out of operation or production for at least one year, but less than or equal to five (5) years, if the source is reactivated in accordance with the requirements of 25 Pa. Code §§ 127.11a and 127.215. The reactivated source will not be considered a new source.

(b) A source which has been out of operation or production for more than five (5) years but less than 10 years may be reactivated and will not be considered a new source if the permittee satisfies the conditions specified in 25 Pa. Code § 127.11a(b).

#021 [25 Pa. Code §§ 121.9 & 127.216]

Circumvention

(a) The owner of this Title V facility, or any other person, may not circumvent the new source review requirements of 25 Pa. Code Chapter 127, Subchapter E by causing or allowing a pattern of ownership or development, including the

SECTION B. General Title V Requirements

phasing, staging, delaying or engaging in incremental construction, over a geographic area of a facility which, except for the pattern of ownership or development, would otherwise require a permit or submission of a plan approval application.

(b) No person may permit the use of a device, stack height which exceeds good engineering practice stack height, dispersion technique or other technique which, without resulting in reduction of the total amount of air contaminants emitted, conceals or dilutes an emission of air contaminants which would otherwise be in violation of this permit, the Air Pollution Control Act or the regulations promulgated thereunder, except that with prior approval of the Department, the device or technique may be used for control of malodors.

#022 [25 Pa. Code §§ 127.402(d) & 127.513(1)]

Submissions

(a) Reports, test data, monitoring data, notifications and requests for renewal of the permit shall be submitted to the:

Regional Air Program Manager
PA Department of Environmental Protection
(At the address given on the permit transmittal letter, or otherwise notified)

(b) Any report or notification for the EPA Administrator or EPA Region III should be addressed to:

Enforcement & Compliance Assurance Division
Air, RCRA and Toxics Branch (3ED21)
Four Penn Center
1600 John F. Kennedy Boulevard
Philadelphia, PA 19103-2852

The Title V compliance certification shall be emailed to EPA at R3_APD_Permits@epa.gov.

(c) An application, form, report or compliance certification submitted pursuant to this permit condition shall contain certification by a responsible official as to truth, accuracy, and completeness as required under 25 Pa. Code § 127.402(d). Unless otherwise required by the Clean Air Act or regulations adopted thereunder, this certification and any other certification required pursuant to this permit shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

#023 [25 Pa. Code §§ 127.441(c) & 127.463(e); Chapter 139; & 114(a)(3), 504(b) of the CAA]

Sampling, Testing and Monitoring Procedures

(a) The permittee shall perform the emissions monitoring and analysis procedures or test methods for applicable requirements of this Title V permit. In addition to the sampling, testing and monitoring procedures specified in this permit, the Permittee shall comply with any additional applicable requirements promulgated under the Clean Air Act after permit issuance regardless of whether the permit is revised.

(b) The sampling, testing and monitoring required under the applicable requirements of this permit, shall be conducted in accordance with the requirements of 25 Pa. Code Chapter 139 unless alternative methodology is required by the Clean Air Act (including §§ 114(a)(3) and 504(b)) and regulations adopted thereunder.

#024 [25 Pa. Code §§ 127.511 & Chapter 135]

Recordkeeping Requirements

(a) The permittee shall maintain and make available, upon request by the Department, records of required monitoring information that include the following:

(1) The date, place (as defined in the permit) and time of sampling or measurements.

(2) The dates the analyses were performed.

(3) The company or entity that performed the analyses.

(4) The analytical techniques or methods used.

SECTION B. General Title V Requirements

(5) The results of the analyses.

(6) The operating conditions as existing at the time of sampling or measurement.

(b) The permittee shall retain records of the required monitoring data and supporting information for at least five (5) years from the date of the monitoring sample, measurement, report or application. Supporting information includes the calibration data and maintenance records and original strip-chart recordings for continuous monitoring instrumentation, and copies of reports required by the permit.

(c) The permittee shall maintain and make available to the Department upon request, records including computerized records that may be necessary to comply with the reporting, recordkeeping and emission statement requirements in 25 Pa. Code Chapter 135 (relating to reporting of sources). In accordance with 25 Pa. Code Chapter 135, § 135.5, such records may include records of production, fuel usage, maintenance of production or pollution control equipment or other information determined by the Department to be necessary for identification and quantification of potential and actual air contaminant emissions. If direct recordkeeping is not possible or practical, sufficient records shall be kept to provide the needed information by indirect means.

#025 [25 Pa. Code §§ 127.411(d), 127.442, 127.463(e) & 127.511(c)]

Reporting Requirements

(a) The permittee shall comply with the reporting requirements for the applicable requirements specified in this Title V permit. In addition to the reporting requirements specified herein, the permittee shall comply with any additional applicable reporting requirements promulgated under the Clean Air Act after permit issuance regardless of whether the permit is revised.

(b) Pursuant to 25 Pa. Code § 127.511(c), the permittee shall submit reports of required monitoring at least every six (6) months unless otherwise specified in this permit. Instances of deviations (as defined in 25 Pa. Code § 121.1) from permit requirements shall be clearly identified in the reports. The reporting of deviations shall include the probable cause of the deviations and corrective actions or preventative measures taken, except that sources with continuous emission monitoring systems shall report according to the protocol established and approved by the Department for the source. The required reports shall be certified by a responsible official.

(c) Every report submitted to the Department under this permit condition shall comply with the submission procedures specified in Section B, Condition #022(c) of this permit.

(d) Any records, reports or information obtained by the Department or referred to in a public hearing shall be made available to the public by the Department except for such records, reports or information for which the permittee has shown cause that the documents should be considered confidential and protected from disclosure to the public under Section 4013.2 of the Air Pollution Control Act and consistent with Sections 112(d) and 114(c) of the Clean Air Act and 25 Pa. Code § 127.411(d). The permittee may not request a claim of confidentiality for any emissions data generated for the Title V facility.

#026 [25 Pa. Code § 127.513]

Compliance Certification

(a) One year after the date of issuance of the Title V permit, and each year thereafter, unless specified elsewhere in the permit, the permittee shall submit to the Department and EPA Region III a certificate of compliance with the terms and conditions in this permit, for the previous year, including the emission limitations, standards or work practices. This certification shall include:

(1) The identification of each term or condition of the permit that is the basis of the certification.
(2) The compliance status.
(3) The methods used for determining the compliance status of the source, currently and over the reporting period.
(4) Whether compliance was continuous or intermittent.

(b) The compliance certification shall be postmarked or hand-delivered no later than thirty days after each anniversary of the date of issuance of this Title V Operating Permit, or on the submittal date specified elsewhere in the permit, to the Department in accordance with the submission requirements specified in Section B, Condition #022 of this permit. The Title V compliance certification shall be emailed to EPA at R3_APD_Permits@epa.gov.

SECTION B. General Title V Requirements

#027 [25 Pa. Code § 127.3]

Operational Flexibility

The permittee is authorized to make changes within the Title V facility in accordance with the following provisions in 25 Pa. Code Chapter 127 which implement the operational flexibility requirements of Section 502(b)(10) of the Clean Air Act and Section 6.1(i) of the Air Pollution Control Act:

(1) Section 127.14 (relating to exemptions)

(2) Section 127.447 (relating to alternative operating scenarios)

(3) Section 127.448 (relating to emissions trading at facilities with federally enforceable emissions caps)

(4) Section 127.449 (relating to de minimis emission increases)

(5) Section 127.450 (relating to administrative operating permit amendments)

(6) Section 127.462 (relating to minor operating permit amendments)

(7) Subchapter H (relating to general plan approvals and operating permits)

#028 [25 Pa. Code §§ 127.441(d), 127.512(i) and 40 CFR Part 68]

Risk Management

(a) If required by Section 112(r) of the Clean Air Act, the permittee shall develop and implement an accidental release program consistent with requirements of the Clean Air Act, 40 CFR Part 68 (relating to chemical accident prevention provisions) and the Federal Chemical Safety Information, Site Security and Fuels Regulatory Relief Act (P.L. 106-40).

(b) The permittee shall prepare and implement a Risk Management Plan (RMP) which meets the requirements of Section 112(r) of the Clean Air Act, 40 CFR Part 68 and the Federal Chemical Safety Information, Site Security and Fuels Regulatory Relief Act when a regulated substance listed in 40 CFR § 68.130 is present in a process in more than the listed threshold quantity at the Title V facility. The permittee shall submit the RMP to the federal Environmental Protection Agency according to the following schedule and requirements:

(1) The permittee shall submit the first RMP to a central point specified by EPA no later than the latest of the following:

(i) Three years after the date on which a regulated substance is first listed under § 68.130; or,
(ii) The date on which a regulated substance is first present above a threshold quantity in a process.

(2) The permittee shall submit any additional relevant information requested by the Department or EPA concerning the RMP and shall make subsequent submissions of RMPs in accordance with 40 CFR § 68.190.

(3) The permittee shall certify that the RMP is accurate and complete in accordance with the requirements of 40 CFR Part 68, including a checklist addressing the required elements of a complete RMP.

(c) As used in this permit condition, the term "process" shall be as defined in 40 CFR § 68.3. The term "process" means any activity involving a regulated substance including any use, storage, manufacturing, handling, or on-site movement of such substances or any combination of these activities. For purposes of this definition, any group of vessels that are interconnected, or separate vessels that are located such that a regulated substance could be involved in a potential release, shall be considered a single process.

(d) If the Title V facility is subject to 40 CFR Part 68, as part of the certification required under this permit, the permittee shall:

(1) Submit a compliance schedule for satisfying the requirements of 40 CFR Part 68 by the date specified in 40 CFR § 68.10(a); or,

(2) Certify that the Title V facility is in compliance with all requirements of 40 CFR Part 68 including the registration and submission of the RMP.

SECTION B. General Title V Requirements

(e) If the Title V facility is subject to 40 CFR Part 68, the permittee shall maintain records supporting the implementation of an accidental release program for five (5) years in accordance with 40 CFR § 68.200.

(f) When the Title V facility is subject to the accidental release program requirements of Section 112(r) of the Clean Air Act and 40 CFR Part 68, appropriate enforcement action will be taken by the Department if:

(1) The permittee fails to register and submit the RMP or a revised plan pursuant to 40 CFR Part 68.

(2) The permittee fails to submit a compliance schedule or include a statement in the compliance certification required under Section B, Condition #026 of this permit that the Title V facility is in compliance with the requirements of Section 112(r) of the Clean Air Act, 40 CFR Part 68, and 25 Pa. Code § 127.512(i).

#029 [25 Pa. Code § 127.512(e)]

Approved Economic Incentives and Emission Trading Programs

No permit revision shall be required under approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this Title V permit.

#030 [25 Pa. Code §§ 127.516, 127.450(d), 127.449(f) & 127.462(g)]

Permit Shield

(a) The permittee's compliance with the conditions of this permit shall be deemed in compliance with applicable requirements (as defined in 25 Pa. Code § 121.1) as of the date of permit issuance if either of the following applies:

(1) The applicable requirements are included and are specifically identified in this permit.

(2) The Department specifically identifies in the permit other requirements that are not applicable to the permitted facility or source.

(b) Nothing in 25 Pa. Code § 127.516 or the Title V permit shall alter or affect the following:

(1) The provisions of Section 303 of the Clean Air Act, including the authority of the Administrator of the EPA provided thereunder.

(2) The liability of the permittee for a violation of an applicable requirement prior to the time of permit issuance.

(3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act.

(4) The ability of the EPA to obtain information from the permittee under Section 114 of the Clean Air Act.

(c) Unless precluded by the Clean Air Act or regulations thereunder, final action by the Department incorporating a significant permit modification in this Title V Permit shall be covered by the permit shield at the time that the permit containing the significant modification is issued.

#031 [25 Pa. Code §135.3]

Reporting

(a) The permittee shall submit by March 1 of each year an annual emissions report for the preceding calendar year. The report shall include information for all active previously reported sources, new sources which were first operated during the preceding calendar year, and sources modified during the same period which were not previously reported. All air emissions from the facility should be estimated and reported.

(b) A source owner or operator may request an extension of time from the Department for the filing of an annual emissions report, and the Department may grant the extension for reasonable cause.

#032 [25 Pa. Code §135.4]

Report Format

Emissions reports shall contain sufficient information to enable the Department to complete its emission inventory. Emissions reports shall be made by the source owner or operator in a format specified by the Department.

SECTION C. Site Level Requirements

I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §123.1]

Prohibition of certain fugitive emissions

(a) No person may permit the emission into the outdoor atmosphere of fugitive air contaminant from a source other than the following:
(1) Construction or demolition of buildings or structures.
(2) Grading, paving and maintenance of roads and streets.
(3) Use of roads and streets. Emissions from material in or on trucks, railroad cars and other vehicular equipment are not considered as emissions from use of roads and streets.
(4) Clearing of land.
(5) Stockpiling of materials.
(6) Open burning operations, as specified in 25 Pa. Code § 129.14.
(7) N/A
(8) N/A
(9) Sources and classes of sources other than those identified in (1)-(8) of this condition, for which the permittee has obtained a determination from the Department that fugitive emissions from the source, after appropriate control, meet the following requirements:
(i) The emissions are of minor significance with respect to causing air pollution; and
(ii) The emissions are not preventing or interfering with the attainment or maintenance of any ambient air quality standard.

 # 002 [25 Pa. Code §123.2]

Fugitive particulate matter

A person may not permit fugitive particulate matter to be emitted into the outdoor atmosphere from a source specified in 25 Pa. Code § 123.1(a) (relating to prohibition of certain fugitive emissions) if such emissions are visible at the point the emissions pass outside the person's property.

 # 003 [25 Pa. Code §123.31]

Limitations

A person may not permit the emission into the outdoor atmosphere of any malodorous air contaminants from any source in a manner that the malodors are detectable outside the property of the person on whose land the source is being operated.

 # 004 [25 Pa. Code §123.41]

Limitations

A person may not permit the emission into the outdoor atmosphere of visible air contaminants in such a manner that the opacity of the emission is either of the following:

(a) Equal to or greater than 20% for a period or periods aggregating more than three (3) minutes in any one (1) hour.

(b) Equal to or greater than 60% at any time.

 # 005 [25 Pa. Code §123.42]

Exceptions

The opacity limitations as per 25 Pa. Code § 123.41 shall not apply to a visible emission in any of the following instances:

(a) When the presence of uncombined water is the only reason for failure of the emission to meet the limitations.
(b) When the emission results from the operation of equipment used solely to train and test persons in observing the opacity of visible emissions.
(c) When the emission results from the sources specified in 25 Pa. Code § 123.1(a) (relating to prohibition of certain fugitive emissions).

SECTION C. Site Level Requirements

 # 006 [25 Pa. Code §129.14]

Open burning operations

No person may permit the open burning of material in the Southeast Air Basin, except where the open burning operations result from:

(a) a fire set to prevent or abate a fire hazard, when approved by the Department and set by or under the supervision of a public officer.

(b) any fire set for the purpose of instructing personnel in fire fighting, when approved by the Department.

(c) a fire set for the prevention and control of disease or pests, when approved by the Department.

(d) a fire set in conjunction with the production of agricultural commodities in their unmanufactured state on the premises of the farm operation.

(e) a fire set for the purpose of burning domestic refuse, when the fire is on the premises of a structure occupied solely as a dwelling by two families or less and when the refuse results from the normal occupancy of the structure.

(f) a fire set solely for recreational or ceremonial purposes.

(g) a fire set solely for cooking food.

II. TESTING REQUIREMENTS.

 # 007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) If at any time the Department has cause to believe that air contaminant emissions from any source may be in excess of the limitations specified in this Permit, or established pursuant to, any applicable rule or regulation contained in 25 Pa. Code Article III, the permittee shall be required to conduct whatever tests are deemed necessary by the Department to determine the actual emission rate(s).

(b) Such testing shall be conducted in accordance with the provisions of 25 Pa. Code Chapter 139, the most current version of the DEP Source Testing Manual, and the EPA Clean Air Act National Stack Testing Guidance, when applicable, and in accordance with any restrictions or limitations established by the Department at such time as it notifies the permittee that testing is required.

III. MONITORING REQUIREMENTS.

 # 008 [25 Pa. Code §123.43]

Measuring techniques

Visible emissions may be measured using either of the following:

(a) A device approved by the Department and maintained to provide accurate opacity measurements.

(b) Observers, trained and qualified, to measure plume opacity with the naked eye or with the aid of any devices approved by the Department.

 # 009 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The permittee shall monitor the facility, once per operating day, for the following:

(1) Odors which may be objectionable (as per 25 Pa. Code §123.31).
(2) Visible Emissions (as per 25 Pa. Code §§123.41 and 123.42).

SECTION C. Site Level Requirements

(3) Fugitive Particulate Matter (as per 25 Pa. Code §§ 123.1 and 123.2).

(b) Objectionable odors, fugitive particulate emissions, and visible emissions that are caused or may be caused by operations at the site shall:
(1) Be investigated;
(2) Be reported to the facility management, or individual(s) designated by the permittee;
(3) Have appropriate corrective action taken (for emissions that originate on-site); and
(4) Be recorded in a permanent written log.

(c) After six (6) months of daily monitoring, and upon the permittee's request, the Department will determine the feasibility of decreasing the monitoring frequency to weekly for the next six month period.

(d) After six (6) months of weekly monitoring, and upon the permittee's request, the Department will determine the feasibility of decreasing the frequency of monitoring to monthly.

(e) The Department reserves the right to change the above monitoring requirements at any time, based on but not limited to: the review of the compliance certification, complaints, monitoring results, and/or Department findings.

Note: DEP has approved permittee's request of reducing the monitoring frequency to monthly.

(f) In addition to the monitoring and recording requirements specified for each source in Section D of this permit, if any, the permittee shall monitor and record data used in emission calculations specified in Braskem Marcus Hook Facility Expansion Project Emissions Summary, submitted by the permittee with Plan Approval No. 23-0012C, and approved by the Department herein.

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

V. REPORTING REQUIREMENTS.

 # 010 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this condition is also derived from 25 Pa. Code § 127.511(c).]

The permittee shall submit the following:

(a) An annual certificate of compliance, due by April 1st of each year, for the period covering January 1 through December 31 of the previous year. This certificate of compliance shall document compliance with all permit terms and conditions set forth in this Title V permit as required under condition #26 of section B of this permit. The annual certificate of compliance shall be submitted to DEP electronically, and to EPA Region III in electronic form at the following email address: R3_APD_Permits@epa.gov. The subject line shall read: "TVOP No. 23-00012, Facility Braskem America Inc/ Marcus Hook."

(b) A semi-annual deviation report to DEP, due by October 1 of each year, for the period covering January 1 through June 30 of the same year. Note: The annual certification of compliance fulfills the obligation for the second deviation reporting period (July 1 through December 31 of the previous year).

 # 011 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The permittee shall report malfunctions, emergencies or incidents of excess emissions to the Department at 484-250-5920. A malfunction is any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. An emergency is any situation arising from sudden and reasonably unforeseeable events beyond the control of the owner or operator of a facility which requires immediate corrective action to restore normal operation and which causes the emission source to exceed emissions, due

SECTION C. Site Level Requirements

to unavoidable increases in emissions attributable to the situation. An emergency shall not include situations caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.

(b) When the malfunction, emergency or incident of excess emissions poses an imminent danger to the public health, safety, welfare, or environment, it shall be reported to the Department and the County Emergency Management Agency by telephone within one (1) hour after the discovery of the malfunction, emergency or incident of excess emissions. The owner or operator shall submit a written or emailed report of instances of such malfunctions, emergencies or incidents of excess emissions to the Department within three (3) business days of the telephone report.

(c) The report shall describe the following:

(1) Name, permit or authorization number, and location of the facility;
(2) Nature and cause of the malfunction, emergency or incident;
(3) Date and time when the malfunction, emergency or incident was first observed;
(4) Expected duration of excess emissions;
(5) Estimated rate of emissions; and
(6) Corrective actions or preventative measures taken.

(d) Any malfunction, emergency or incident of excess emissions that is not subject to the notice requirements of paragraph (b) of this condition shall be reported to the Department by telephone within 24 hours (or by 4:00 PM of the next business day, whichever is later) of discovery and in writing or by e-mail within five (5) business days of discovery. The report shall contain the same information required by paragraph (c), and any permit specific malfunction reporting requirements.

(e) During an emergency an owner or operator may continue to operate the source at their discretion provided they submit justification for continued operation of a source during the emergency and follow all the notification and reporting requirements in accordance with paragraphs (b)-(d), as applicable, including any permit specific malfunction reporting requirements.

(f) Reports regarding malfunctions, emergencies or incidents of excess emissions shall be submitted to the appropriate DEP Regional Office Air Program Manager.

(g) Any emissions resulted from malfunction or emergency are to be reported in the annual emissions inventory report, if the annual emissions inventory report is required by permit or authorization.

VI. WORK PRACTICE REQUIREMENTS.

 # 012 [25 Pa. Code §123.1]

Prohibition of certain fugitive emissions

A person responsible for any source specified in 25 Pa. Code § 123.1 shall take all reasonable actions to prevent particulate matter from becoming airborne. These actions shall include, but not be limited to, the following

(a) Use, where possible, of water or suitable chemicals, for control of dust in the demolition of buildings or structures, construction operations, the grading of roads, or the clearing of land.
(b) Application of asphalt, water, or other suitable chemicals, on dirt roads, material stockpiles and other surfaces which may give rise to airborne dusts.
(c) Paving and maintenance of roadways.
(d) Prompt removal of earth or other material from paved streets onto which earth or other material has been transported by trucking or earth moving equipment, erosion by water, or by other means.

 # 013 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The permittee shall begin to immediately implement measures, which may include for the installation of an air cleaning device(s), if necessary, to reduce the air contaminant emissions to within applicable limitations, if at any time the operation

SECTION C. Site Level Requirements

of the source(s) indentified this permit, is causing the emission of air contaminants in excess of the limitations specified in, or established pursuant to, 25 Pa. Code Article III or any other applicable rule promulgated under the Clean Air Act.

(b) The permittee may not modify any source identified in this permit, prior to obtaining Department approval, except those modifications authorized by Condition #19(g), of Section B of this permit.

VII. ADDITIONAL REQUIREMENTS.

 # 014 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) This Operating Permit contains conditions pursuant to 25 Pa. Code Sections 129.96 - 129.100 (RACT II) that satisfies 129.91 - 129.95 (RACT I), developed previously and 129.111-129.115 (RACT III).

(b) All RACT monitoring and recordkeeping measures shall be fully implemented upon issuance of this permit.

 # 015 [25 Pa. Code §127.441]

Operating permit terms and conditions.

For the purpose of this Operating Permit:

(1) the Polypropylene Plant No. 1 consists of:
Source ID 101A - Three Storage Silos
Source ID 102A - Polypropylene Mfg. Sources
Source ID 103A - Fugitive Sources

(2) the Polypropylene Plant No. 2 consists of:
Source ID 101B - Three Storage Silos
Source ID 102B - Polypropylene Mfg. Sources
Source ID 103B - Fugitive Sources

VIII. COMPLIANCE CERTIFICATION.

No additional compliance certifications exist except as provided in other sections of this permit including Section B (relating to Title V General Requirements).

IX. COMPLIANCE SCHEDULE.

No compliance milestones exist.

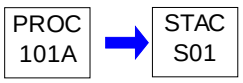
***** Permit Shield In Effect *****

SECTION D. Source Level Requirements

Source ID: 101A Source Name: PLANT 1, THREE STORAGE SILOS

Source Capacity/Throughput: N/A polypropylene pellets

Conditions for this source occur in the following groups: GROUP 1



I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §123.13]

Processes

No person may permit the emission into the outdoor atmosphere of particulate matter in a manner that the concentration of particulate mattter in the effluent gas exceeds 0.04 grains per dry standard cubic foot, when the effluent gas volume is less than 150,000 dry standard cubic feet per minute.

 # 002 [25 Pa. Code §129.114]

Alternative RACT proposal and petition for alternative compliance schedule

[Additional authority of this permit condition is also derived from 25 Pa. Code §127.511.]

The total volatile organic compounds (VOC) emissions from the silos under this source identification shall not exceed 12.10 tons on a 12-month rolling sum.

Throughput Restriction(s).

 # 003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Polypropylene production from Plant 1 shall not exceed 595,680,000 pounds per 12-month rolling sum.

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

III. MONITORING REQUIREMENTS.

 # 004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is from 25 Pa. Code §129.115.]

(a) The permitee shall monitor the loading (polypropylene production) and hours of operation of the silos on a monthly basis.

IV. RECORDKEEPING REQUIREMENTS.

 # 005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is from 25 Pa. Code §129.115.]

The emissions from the silos shall be calculated using the methods specified in Braskem Marcus Hook Facility Expansion Project Emissions Summary, submitted by the permittee with Plan Approval No. 23-0012C, and approved by the Department herein.

SECTION D. Source Level Requirements

(a) The PM/PM10 emissions shall be calculated using the emission factor from USEPA AP-42 Table 6.6.4-1, the polypropylene production, and the elutriator efficiency.

(b) The VOC emissions shall be calculated using the hours of operation and the VOC emission rate in lb/hr from the most recent stack test.

(c) The permittee shall keep record of the PM/PM10 emissions on a monthly basis and as a 12-month rolling sum.

(d) The permittee shall keep records of the operating hours of the silos on a monthly basis.

The permittee may revise the emission calculations upon notice to and approval of the Department.

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

VII. ADDITIONAL REQUIREMENTS.

 # 006 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.560]

Subpart DDD - Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry

Applicability and designation of affected facilities.

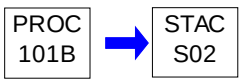
The silos are not subject to the provisions of 40 CFR 60 Subpart DDD, as per the definition of "commenced" in 40 CFR §60.2, and the applicability specified in 40 CFR §60.560(b)(1)(ii).

***** Permit Shield in Effect. *****

SECTION D. Source Level Requirements

Source ID: 101B Source Name: PLANT 2, THREE STORAGE SILOS

Source Capacity/Throughput: N/A polypropylene pellets



I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §123.13]

Processes

No person may permit the emission into the outdoor atmosphere of particulate matter in a manner that the concentration of particulate matter in the effluent gas exceeds 0.04 grains per dry standard cubic foot, when the effluent gas volume is less than 150,000 dry standard cubic feet per minute.

 # 002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512(h).]

(a) The combined Volatile Organic Compounds (VOC) emissions from the Polypropylene Plant No.2 shall not exceed 24.30 tons per year on a twelve (12) month rolling basis.

(b) The combined Particulate Matter (PM) emissions from the Polypropylene Plant No.2 shall be less than 7.10 tons per year on a twelve (12) month rolling basis.

(c) The polypropylene Plant No.2 consists of:
Source 101B - Three Storage Silos
Source 102B - Polypropylene Mfg. Sources
Source 103B - Fugitive Sources

 # 003 [25 Pa. Code §129.114]

Alternative RACT proposal and petition for alternative compliance schedule

[Additional authority of this permit condition is also derived from 25 Pa. Code §127.512.]

VOC emissions from the silos under this source identification shall not exceed 1.06 pounds per hour and 4.64 tons per year as 12-month rolling sum.

 # 004 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.560]

Subpart DDD - Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry

Applicability and designation of affected facilities.

The Total Organic Compound (TOC) from the silo's stack shall be less than 0.10 percent by weight.

Throughput Restriction(s).

 # 005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Polypropylene production from Plant 2 shall not exceed 595,680,000 pounds per 12-month rolling sum.

SECTION D. Source Level Requirements

II. TESTING REQUIREMENTS.

 # 006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for these conditions is derived from 40 CFR §60.564.]

(a) As per 40 CFR §60.564(a)(1), whenever changes are made in production capacity, feedstock type or catalyst type, or whenever there is an addition of a control device, the permittee shall determine compliance with the 40 CFR §60.560(g), and must use as reference methods and procedures in appendix A of 40 CFR 60 or other methods and procedures specified in 40 CFR §60.564(d) for weight percent VOC of the uncontrolled individual vent stream.

(b) The test shall be performed within 180 days after startup of the source with the new conditions. The test shall be conducted while the source is operating at or above 90 percent of the production rate.

(c) The source testing will also establish compliance with the short-term emissions limitations in Condition #003.

(d) The permittee shall make the following submissions. (1) through (3), according to the procedures in Condition #007 of this section.

(1) At least ninety (90) days prior to the test, the permittee shall submit to the Department for approval the procedures for the test and a sketch with dimensions indicating the location of sampling ports and other data to ensure the collection of representative samples.

(2) At least thirty (30) days prior to the test, the Regional Air Quality Manager and PSMIS Manager, shall be informed of the date and time of the test.

(3) Within sixty (60) days after the source test(s) (unless a more stringent regulatory requirement applies), one paper copy plus one electronic copy of the complete test report, including all operating conditions, shall be submitted to the Regional Air Quality Manager and to the PSIMS Administrator for approval.

(e) In the event that any of the above deadlines cannot be met, the permittee may request an extension for the due date(s) in writing and include a justification for the extension. The Department may grant an extension for a reasonable cause.

 # 007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The permittee shall email all source test submissions (notifications, protocols, reports, supplemental information, etc.) to both the AQ Program Manager for the Southeast Regional Office and the PSIMS Administrator in Central Office (email addresses are provided below). Any questions or concerns about source testing submissions can be sent to RA-EPstacktesting@pa.gov and the PSIMS Administrator will address them.

Southeast Region
RA-EPSEstacktesting@pa.gov

Central Office
RA-EPstacktesting@pa.gov

(b) The following pertinent information shall be listed on the title page.

1. Test Date(s)

a. For protocols, provide the proposed date on which testing will commence or “TBD”
b. For reports, provide the first and last day of testing

2. Facility Identification Number (Facility - ID): For test programs that were conducted under a multi-site protocol, also include the PF Id under which the protocol was stored in PSIMS, as indicated in the protocol response letter.

SECTION D. Source Level Requirements

3. Source ID(s) for the applicable source(s) and air pollution control device(s): The term Source ID is used in the permit but "Other Id" is used in DEP electronic systems. They are the same number and must also be listed for control equipment

4. Testing Requirements (all that apply)

a. Plan approval number(s)
b. Operating permit number
c. Applicable federal subpart(s) (i.e. 40 CFR 60, Subpart JJJJ)
d. Special purpose(s) (Consent Order, RFD, RACT II, Tier II, etc.)

(c) If confidential information must be submitted, submit both a public copy, which has been redacted, and a confidential copy. The cover page of each submittal should state whether it is a "Public Copy" or "Confidential Copy" and each page of the latter must be marked "CONFIDENTIAL".

III. MONITORING REQUIREMENTS.

 # 008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is from 25 Pa. Code §§ 129.115.]

The permitee shall monitor the loading (polypropylene production) and hours of operation of the silos on a monthly basis.

IV. RECORDKEEPING REQUIREMENTS.

 # 009 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is from 25 Pa. Code §§ 129.115.]

The emissions from the silos shall be calculated using the methods specified in Braskem Marcus Hook Facility Expansion Project Emissions Summary, submitted by the permittee with Plan Approval No. 23-0012C, and approved by the Department herein.

(a) The PM/PM10 emissions shall be calculated using the emission factor from USEPA AP-42 Table 6.6.4-1, the polypropylene production, and the elutriator efficiency.

(b) The VOC emissions shall be calculated using the hours of operation and the VOC emission rate in lb/hr from the most recent stack test.

(c) The permittee shall keep record of the VOC and PM/PM10 emissions on a monthly basis and as a 12-month rolling sum.

The permittee may revise the emission calculations upon notice to and approval of the Department.

 # 010 [25 Pa. Code §129.115]

Written notification, compliance demonstration and recordkeeping and reporting requirements

[Additional authority for this permit condition is also derived from 25 Pa. Code §127.511.]

The permittee shall keep records of:

(a) polypropylene production on a monthly basis and as a 12-month rolling sum;

(b) silo operating hours on a monthly basis.

 # 011 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.565]

Subpart DDD - Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry

Reporting and recordkeeping requirements.

SECTION D. Source Level Requirements

(a) As per 40 CFR §60.565(a)(10), the permittee shall keep an up-to-date, readily-accessible record of each process operating variable that may result in an increase in the uncontrolled annual emissions or the TOC weight percent, should such operating variable be changed.

(b) As per 40 CFR §60.565(h), the permittee shall keep up-to-date, readily-accessible records of any change in process operation that increases the uncontrolled annual emissions or the VOC weight percent of the individual stream.

V. REPORTING REQUIREMENTS.

 # 012 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.565]

Subpart DDD - Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry

Reporting and recordkeeping requirements.

As per 40 CFR §60.565(k), the permittee shall submit to the Department semiannual reports of any change in process operation that increases the uncontrolled annual emissions or the VOC weight percent of the individual stream, as recorded in 40 CFR §60.565(h).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

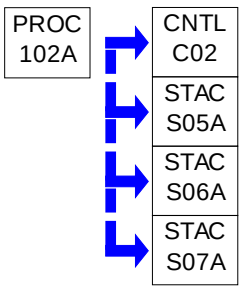
***** Permit Shield in Effect. *****

SECTION D. Source Level Requirements

Source ID: 102A Source Name: PLANT 1 POLYPROPYLENE MFG SOURCES

Source Capacity/Throughput: N/A Prop & Ethylene

Conditions for this source occur in the following groups: GROUP 1



I. RESTRICTIONS.

Throughput Restriction(s).

 # 001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Polypropylene production for this plant shall not exceed 595,680,000.00 pounds per 12-month rolling sum.

Control Device Efficiency Restriction(s).

 # 002 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.562-1]

Subpart DDD - Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry

Standards: Process emissions.

[Additional authority for this permit condition is also derived from 25 Pa. Code §§ 127.512(h) and 129.114.]

(a) As per 40 CFR §§60.18(c), and 60.562-1(a)(1)(i)(C), the continuous and intermittent emission streams from the process shall be vented and combusted in the flare that is:

(1) operated with no visible emissions, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.

(2) operated and maintained with a stable flame present at all times.

(3) The flare shall be used only with the net heating value of the gas being combusted being 11.2 MJ/scm (300 Btu/scf) or greater, as determined by the methods specified in 40 CFR §60.564(f). Compliance with this condition shall be determined on a three (3) hour rolling average, using a gas chromatography analyzer or DEP approved device.

(4) The steam-assisted flare shall be designed for and operated with a maximum exit velocity of 18.3 m/sec (60 ft/sec) or Vmax, as determined by the methods specified in 40 CFR §60.564(g). Compliance with this condition shall be determined on a three (3) hour rolling average, using a gas flow meter or DEP approved device.

(5) The permittee shall monitor the flare to ensure that it is operated and maintained in conformance with its design.

(6) The flare shall be operated at all times when emissions may be vented to it.

(b) As per 40 CFR §60.562-1(d), closed vent systems and the flare shall be operated at all times when emissions may be vented to them.

(c) As per 40 CFR §60.562-1(e), vent systems that contain valves that could divert a vent stream from the flare shall have

SECTION D. Source Level Requirements

carsealed opened all valves in the vent system from the emission source to the flare and car-sealed closed all valves in vent system that would lead the vent stream to the atmosphere, either directly or indirectly, bypassing the flare.

II. TESTING REQUIREMENTS.

 # 003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.564]

Subpart DDD - Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry

Test methods and procedures.

[Additional authority for this permit condition is from 25 Pa. Code 127.441.]

(a) In conducting the performance tests required in 40 CFR §60.8, the permittee shall use as reference methods and procedures the test methods in appendix A of 40 CFR Part 60 or other methods and procedures specified in 40 CFR §60.564, except as provided under 40 CFR §60.8(b).

Whenever changes are made in production capacity, feedstock type or catalyst type, or whenever there is replacement, removal, or addition of a control device, the permittee shall conduct a performance test according to the procedures in 40 CFR §60.564 as appropriate, in order to determine compliance with 40 CFR §60.562-1.

(b) As per 40 CFR §60.564(e), the permittee shall determine compliance of the flare with the visible emission and flare provisions in 40 CFR §60.562-1 as follows:

(1) Method 22 shall be used to determine visible emissions. The observation period for each run shall be 2 hours.

(2) The monitoring device of 40 CFR §60.563(b)(2) shall be used to determine whether a flame is present.

(c) As per 40 CFR §60.564(f), the permittee shall determine compliance with the net heating value provisions in 40 CFR §60.18 as referenced by 40 CFR §60.562-1(a)(1)(i)(C). The net heating value of the process vent stream being combusted in the flare shall be computed as the equation of 40 CFR §60.564(f).

(1) Method 18 shall be used to determine the concentration of each individual organic component (Cj) in the gas stream. Method 1 or 1A, as appropriate, shall be used to determine the sampling site to the inlet of the flare. Using this same sample, ASTM D1946-77 (incorporated by reference-see 40 CFR §60.17) shall be used to determine the hydrogen and carbon monoxide content.

(2) The sampling time for each run shall be 1 hour in which either an integrated sample or four grab samples shall be taken. If grab sampling is used, then the samples shall be taken at 15-minute intervals.

(3) Published or calculated values shall be used for the net heats of combustion of the sample components. If values are not published or cannot be calculated, ASTM D2382-76 (incorporated by reference-see 40 CFR §60.17) may be used to determine the net heat of combustion of component "j."

(d) As per 40 CFR §60.564(g) , the permittee shall determine compliance with the exit velocity provisions in 40 CFR §60.18 as referenced by 40 CFR §60.562-1(a)(1)(i)(C) as follows:

(1) The net heating value (HT) of the process vent shall be determined according to the procedures in 40 CFR §60.564(f) to determine the applicable velocity requirements.

(2) The maximum permitted velocity (Vmax) for steam-assisted and nonassisted flares shall be computed using the equation specified in 40 CFR §60.564(g)(2).

(3) As per 40 CFR §60.564(g)(4), the actual exit velocity of the flare shall be determined by dividing the volumetric flow rate (in units of standard temperature and pressure), as determined by Method 2, 2A, 2C, or 2D as appropriate, by the

unobstructed (free) cross sectional area of the flare tip.

(e) The test shall be performed within 180 days after startup of the source with the new conditions. The test shall be conducted while the source is operating at or above 90 percent of the production rate.

(f) At least ninety (90) days prior to the test, the permittee shall submit to the Department for approval the procedures for the test and a sketch with dimensions indicating the location of sampling ports and other data to ensure the collection of representative samples.

(g) At least thirty (30) days prior to the test, the Regional Air Quality Manager, shall be informed of the date and time of the test.

(h) Within sixty (60) days after the source test(s), two copies of the complete test report, including all operating conditions, shall be submitted to the Regional Air Quality Manager for approval.

(i) In the event that any of the above deadlines cannot be met, the permittee may request an extension for the due date(s) in writing and include a justification for the extension. The Department may grant an extension for a reasonable cause.

III. MONITORING REQUIREMENTS.

 # 004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is from 25 Pa. Code § 129.115.]

The permittee shall monitor the following:

(a) the hours and days of operation of the plant on a monthly basis, and

(b) data including mass flows, maintenance purge activities, or other engineering material balances necessary for emissions calculations.

(c) the PM/PM10 emissions on a monthly and 12 month rolling basis

 # 005 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.563]

Subpart DDD - Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry

Monitoring requirements.

[Additional authority for this permit condition is also derived from 25 Pa. Code §§ 127.511 and 129.115 and 40 CFR §§ 60.18 and 64.3.]

(a) As per 40 CFR §60.563(a)(2) and (3), the permittee shall calibrate, maintain, and operate according to manufacturer's specifications the monitoring systems as follows:

(1) A flame monitoring device to indicate and record continuously whether a flare or pilot light flame is present.

(2) A flow monitoring indicator to indicate and record whether or not flow exists at least once every fifteen minutes.

(b) As per 40 CFR §60.563(b)(2), the permittee shall operate the flare as follows:

(i) A flame monitoring device shall be operated to indicate the presence of a flare flame.

(ii) A thermocouple or equivalent monitoring device to indicate the presence of a flame at each pilot light, if used to comply with 40 CFR §60.562-1(a)(2).

(c) As per 40 CFR §60.563(c), the permittee shall monitor the flare to ensure that it is operated and maintained in

conformance with its design.

(d) As per 40 CFR §60.563(d), a vent system that contains valves that could divert a vent stream from the flare, the valves shall be monitored once a month. The permittee shall check the position of the valves and the condition of the car seal, and identify all times when the car seals have been broken and the valve position has been changed (i.e., from opened to closed for valves in the vent piping to the control device and from closed to open for valves that allow the stream to be vented directly or indirectly to the atmosphere).

IV. RECORDKEEPING REQUIREMENTS.

 # 006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is from 25 Pa.Code §129.115.]

The emissions from this source shall be calculated using the methods specified in Braskem Marcus Hook Facility Expansion Project Emissions Summary, submitted by the permittee with Plan Approval No. 23-0012C, and approved by the Department herein.

(a) The permittee shall calculate emissions of

(1) VOC from point sources, using mass flow meter data, hours of operation, and material balances.
(2) VOC from maintenance and purge etc., using mass balance and number of activities in each month.
(3) PM/PM10, using hours of operation and:
(i) for the elutriator baghouse - the recorded air flow rate and hours of operation, and the manufacturer guaranteed emission concentration limit (gr/dscf).
(ii) for the manufacturing baghouses - the determined emission factor in lb/hr.

The permittee may revise the emissions calculations upon notice to and approval of the Department.

 # 007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is from 25 Pa. Code §129.115.]

The permittee shall record the following:

(a) the design exhaust air flow rate (scfm) for the elutriator baghouses,
(b) the hours of operation of the plant on a monthly basis, and
(c) data including mass flows, maintenance purge activities, or other engineering material balances necessary for emissions calculations
(d) the polypropylene production on a monthly basis and as a 12-month rolling sum

 # 008 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.565]

Subpart DDD - Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry

Reporting and recordkeeping requirements.

[Additional authority for this permit condition is also derived from 25 Pa. Code §§ 127.511, 129.115.]

(a) As per 40 CFR §60.565(a)(3), the permittee shall keep an up-to-date, readily-accessible record of the following information measured during each flare performance test, and shall include the following information in the report of the initial performance test in addition to the written results of such performance tests as required under 40 CFR §60.8.

(i) All visible emission readings, heat content determinations, flow rate measurements, and exit velocity determinations made during the performance test,

(ii) Continuous records of the pilot flame heat-sensing monitoring, and

SECTION D. Source Level Requirements

(iii) Records of all periods of operations during which the pilot flame is absent.

(b) As per 40 CFR §60.565(b)(2), the permittee shall keep the following records for vent system containing valves that could divert the emission stream away from the flare:

(i) All periods when flow is indicated if flow indicators are installed under 40 CFR §60.563(d)(1).

(ii) All times when maintenance is performed on car-sealed valves, when the car seal is broken, and when the valve position is changed (i.e., from open to closed for valves in the vent piping to the control device and from closed to open for valves that vent the stream directly or indirectly to the atmosphere bypassing the control device).

(c) As per 40 CFR §60.565(e), the permittee shall keep readily accessible continuous records of:

(1) The flare or pilot light flame heat sensing monitoring specified under 40 CFR §60.563(b)(2), and

(2) All periods of operation in which the flare or pilot flame, as appropriate, is absent.

(3) These records shall be kept for 5 years.

(d) As per 40 CFR §60.565(i), the permittee is exempt from 40 CFR §60.7(c) of the General Provisions.

(e) As per 40 CFR §60.565(g), the permittee shall keep up-to-date, readily accessible records of:

(1) Any changes in production capacity, or any replacement, removal, or addition of product recovery equipment; and

(2) The results of any performance test performed pursuant to the procedures specified by 40 CFR §60.564.

V. REPORTING REQUIREMENTS.

 # 009 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.565]

Subpart DDD - Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry

Reporting and recordkeeping requirements.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.511]

As per 40 CFR §60.565(k), the permittee shall submit to the Department semiannual reports, due by March 1 and September 1 each year, of the following recorded information.

(a) All periods recorded under 40 CFR §60.565(b)(2), when the vent stream has been diverted from the flare.

(b) All periods recorded under 40 CFR §60.565(e) in which the flare or pilot flame was absent.

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

VII. ADDITIONAL REQUIREMENTS.

 # 010 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.560]

Subpart DDD - Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry

Applicability and designation of affected facilities.

SECTION D. Source Level Requirements

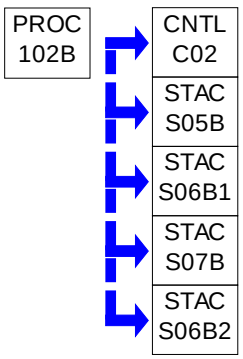
Emergency vent streams, as defined in 40 CFR §60.561, are exempt from the requirements of 40 CFR 60.562-1(a)(2) as per 40 CFR §60.560(h).

***** Permit Shield in Effect. *****

SECTION D. Source Level Requirements

Source ID: 102B Source Name: PLANT 2 POLYPROPYLENE MFG SOURCES

Source Capacity/Throughput: N/A prop & ethylene



I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code §127.512(h).]

(a) The combined Volatile Organic Compounds (VOC) emissions from the Polypropylene Plant No.2 shall not exceed 24.30 tons per year on a twelve (12) month rolling basis.

(b) The combined Particulate Matter (PM) emissions from the Polypropylene Plant No.2 shall be less than 7.10 tons per year on a twelve (12) month rolling basis.

(c) The polypropylene Plant No.2 consists of:
Source 101B - Three Storage Silos
Source 102B - Polypropylene Mfg. Sources
Source 103B - Fugitive Sources

Throughput Restriction(s).

 # 002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Polypropylene production for this plant shall not exceed 595,680,000.00 pounds per 12-month rolling sum.

Control Device Efficiency Restriction(s).

 # 003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.562-1]

Subpart DDD - Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry

Standards: Process emissions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512(h) and 129.114.]

(a) As per 40 CFR §§60.18(c), and 60.562-1(a)(1)(i)(C) , the continuous and intermittent emission streams from the process shall be vented and combusted in the flare that is:

(1) operated with no visible emissions, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.

(2) operated and maintained with a stable flame present at all times.

SECTION D. Source Level Requirements

(3) The flare shall be used only with the net heating value of the gas being combusted being 11.2 MJ/scm (300 Btu/scf) or greater, as determined by the methods specified in 40 CFR §60.564(f). Compliance with this condition shall be determined on a three (3) hour rolling average, using a gas chromatography analyzer or DEP approved device.

(4) The steam-assisted flare shall be designed for and operated with a maximum exit velocity of 18.3 m/sec (60 ft/sec) or Vmax, as determined by the methods specified in 40 CFR §60.564(g). Compliance with this condition shall be determined on a three (3) hour rolling average, using a gas flow meter or DEP approved device.

(5) The permittee shall monitor the flare to ensure that it is operated and maintained in conformance with its design.
(6) The flare shall be operated at all times when emissions may be vented to it.

(b) As per 40 CFR §60.562-1(d), closed vent systems and the flare shall be operated at all times when emissions may be vented to them.

(c) As per 40 CFR §60.562-1(e), vent systems that contain valves that could divert a vent stream from the flare shall have car-sealed opened all valves in the vent system from the emission source to the flare and car-sealed closed all valves in vent system that would lead the vent stream to the atmosphere, either directly or indirectly, bypassing the flare.

II. TESTING REQUIREMENTS.

 # 004 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.564]

Subpart DDD - Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry

Test methods and procedures.

[Additional authority for this permit condition is from 25 Pa. Code 127.441.]

(a) In conducting the performance tests required in 40 CFR §60.8, the permittee shall use as reference methods and procedures the test methods in appendix A of 40 CFR Part 60 or other methods and procedures specified in 40 CFR §60.564, except as provided under 40 CFR §60.8(b).

Whenever changes are made in production capacity, feedstock type or catalyst type, or whenever there is replacement, removal, or addition of a control device, the permittee shall conduct a performance test according to the procedures in 40 CFR §60.564 as appropriate, in order to determine compliance with 40 CFR §60.562-1.

(b) As per 40 CFR §60.564(e), the permittee shall determine compliance of the flare with the visible emission and flare provisions in 40 CFR §60.562-1 as follows:

(1) Method 22 shall be used to determine visible emissions. The observation period for each run shall be 2 hours.

(2) The monitoring device of 40 CFR §60.563(b)(2) shall be used to determine whether a flame is present.

(c) As per 40 CFR §60.564(f), the permittee shall determine compliance with the net heating value provisions in 40 CFR §60.18 as referenced by 40 CFR §60.562-1(a)(1)(i)(C). The net heating value of the process vent stream being combusted in the flare shall be computed as the equation of 40 CFR §60.564(f).

(1) Method 18 shall be used to determine the concentration of each individual organic component (Cj) in the gas stream. Method 1 or 1A, as appropriate, shall be used to determine the sampling site to the inlet of the flare. Using this same sample, ASTM D1946-77 (incorporated by reference-see 40 CFR §60.17) shall be used to determine the hydrogen and carbon monoxide content.

(2) The sampling time for each run shall be 1 hour in which either an integrated sample or four grab samples shall be taken. If grab sampling is used, then the samples shall be taken at 15 minute intervals.

(3) Published or calculated values shall be used for the net heats of combustion of the sample components. If values are not published or cannot be calculated, ASTM D2382-76 (incorporated by reference-see 40 CFR §60.17) may be used to determine the net heat of combustion of component "j."

SECTION D. Source Level Requirements

(d) As per 40 CFR §60.564(g) , the permittee shall determine compliance with the exit velocity provisions in 40 CFR §60.18 as referenced by 40 CFR §60.562-1(a)(1)(i)(C) as follows:

(1) The net heating value (HT) of the process vent shall be determined according to the procedures in 40 CFR §60.564(f) to determine the applicable velocity requirements.

(2) The maximum permitted velocity (Vmax) for steam-assisted and nonassisted flares shall be computed using the equation specified in 40 CFR §60.564(g)(2).

(3) As per 40 CFR §60.564(g)(4), the actual exit velocity of the flare shall be determined by dividing the volumetric flow rate (in units of standard temperature and pressure), as determined by Method 2, 2A, 2C, or 2D as appropriate, by the unobstructed (free) cross sectional area of the flare tip.

(e) The test shall be performed within 180 days after startup of the source with the new conditions. The test shall be conducted while the source is operating at or above 90 percent of the production rate.

(f) At least ninety (90) days prior to the test, the permittee shall submit to the Department for approval the procedures for the test and a sketch with dimensions indicating the location of sampling ports and other data to ensure the collection of representative samples.

(g) At least thirty (30) days prior to the test, the Regional Air Quality Manager, shall be informed of the date and time of the test.

(h) Within sixty (60) days after the source test(s), two copies of the complete test report, including all operating conditions, shall be submitted to the Regional Air Quality Manager for approval.

(i) In the event that any of the above deadlines cannot be met, the permittee may request an extension for the due date(s) in writing and include a justification for the extension. The Department may grant an extension for a reasonable cause.

III. MONITORING REQUIREMENTS.

 # 005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is from 25 Pa. Code §129.115.]

The permittee shall monitor the following:
(a) the hours of operation of the plant on a monthly basis, and
(b) data including mass flows, maintenance purge activities, or other engineering material balances necessary for emissions calculations
(c) the polypropylene production on a monthly basis and as a 12-month rolling sum
(d) VOC and PM/PM10 emissions on a monthly and 12 month rolling basis using the calculation procedures in Condition #007.

 # 006 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.563]

Subpart DDD - Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry

Monitoring requirements.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.511 and 129.115 and 40 CFR §§ 60.18 and 64.3.]

(a) As per 40 CFR §60.563(a)(2) and (3), the permittee shall calibrate, maintain, and operate according to manufacturer's specifications the monitoring systems as follows:

(1) A flame monitoring device to indicate and record continuously whether a flare or pilot light flame is present.

(2) A flow monitoring indicator to indicate and record whether or not flow exists at least once every fifteen minutes.

SECTION D. Source Level Requirements

(b) As per 40 CFR §60.563(b)(2), the permittee shall operate the flare as follows:

(i) A flame monitoring device shall be operated to indicate the presence of a flare flame.

(ii) A thermocouple or equivalent monitoring device to indicate the presence of a flame at each pilot light, if used to comply with 40 CFR §60.562-1(a)(2).

(c) As per 40 CFR §60.563(c), the permittee shall monitor the flare to ensure that it is operated and maintained in conformance with its design.

(d) As per 40 CFR §60.563(d), a vent system that contains valves that could divert a vent stream from the flare, the valves shall be monitored once a month. The permittee shall check the position of the valves and the condition of the car seal, andidentify all times when the car seals have been broken and the valve position has been changed (i.e., from opened to closed for valves in the vent piping to the control device and from closed to open for valves that allow the stream to be venteddirectly or indirectly to the atmosphere).

IV. RECORDKEEPING REQUIREMENTS.

 # 007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is from 25 Pa. Code §129.115]

The emissions from this source shall be calculated using the methods specified in Braskem Marcus Hook Facility Expansion Project Emissions Summary, submitted by the permittee with Plan Approval No. 23-0012C, and approved by the Department herein.

(a) The permittee shall calculate emissions of

(1) VOC from point sources, using mass flow meter data, hours of operation, and material balances.
(2) VOC from maintenance and purge etc., using mass balance and number of activities in each month.
(3) PM/PM10, using hours of operation and:
(i) for the elutriator baghouse - the recorded air flow rate and hours of operation, and the manufacturer guaranteed emission concentration limit (gr/dscf).
(ii) for the manufacturing baghouses - the determined emission factor in lb/hr.

The permittee may revise the emissions calculations upon notice to and approval of the Department.

(b) The permittee shall keep records of VOC and PM/PM10 emissions on a monthly basis and 12-month rolling sum.

 # 008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall record the following:

(a) the design exhaust air flow rate (scfm) for the elutriator baghouses,
(b) the hours of operation of the plant on a monthly basis, and
(c) data including mass flows, maintenance purge activities, or other engineering material balances necessary for emissions calculations
(d) the polypropylene production on a monthly basis and as a 12-month rolling sum

 # 009 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.565]

Subpart DDD - Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry

Reporting and recordkeeping requirements.

[Additional authority for this permit condition is also derived from 25 Pa. Code §§ 127.511 and 129.115.]

SECTION D. Source Level Requirements

(a) As per 40 CFR §60.565(a)(3), the permittee shall keep an up-to-date, readily-accessible record of the following information measured during each flare performance test, and shall include the following information in the report of the initial performance test in addition to the written results of such performance tests as required under 40 CFR §60.8.

(i) All visible emission readings, heat content determinations, flow rate measurements, and exit velocity determinations made during the performance test,

(ii) Continuous records of the pilot flame heat-sensing monitoring, and

(iii) Records of all periods of operations during which the pilot flame is absent.

(b) As per 40 CFR §60.565(b)(2), the permittee shall keep the following records for vent system containing valves that could divert the emission stream away from the flare:

(i) All periods when flow is indicated if flow indicators are installed under 40 CFR §60.563(d)(1).

(ii) All times when maintenance is performed on car-sealed valves, when the car seal is broken, and when the valve position is changed (i.e., from open to closed for valves in the vent piping to the control device and from closed to open for valves that vent the stream directly or indirectly to the atmosphere bypassing the control device).

(c) As per 40 CFR §60.565(e), the permittee shall keep readily accessible continuous records of:

(1) The flare or pilot light flame heat sensing monitoring specified under 40 CFR §60.563(b)(2), and

(2) All periods of operation in which the flare or pilot flame, as appropriate, is absent.

(3) These records shall be kept for 5 years.

(d) As per 40 CFR §60.565(i), the permittee is exempt from 40 CFR §60.7(c) of the General Provisions.

(e) As per 40 CFR §60.565(g), the permittee shall keep up-to-date, readily accessible records of:

(1) Any changes in production capacity, or any replacement, removal, or addition of product recovery equipment; and

(2) The results of any performance test performed pursuant to the procedures specififed by 40 CFR §60.564.

V. REPORTING REQUIREMENTS.

 # 010 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.565]

Subpart DDD - Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry

Reporting and recordkeeping requirements.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.511]

As per 40 CFR §60.565(k), the permittee shall submit to the Department semiannual reports, due by March 1 and September 1 each year, of the following recorded information.

(a) All periods recorded under 40 CFR §60.565(b)(2), when the vent stream has been diverted from the flare.

(b) All periods recorded under 40 CFR §60.565(e) in which the flare or pilot flame was absent.

SECTION D. Source Level Requirements

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

VII. ADDITIONAL REQUIREMENTS.

 # 011 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.560]

Subpart DDD - Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry

Applicability and designation of affected facilities.

Emergency vent streams, as defined in 40 CFR §60.561, are exempt from the requirements of 40 CFR 60.562-1(a)(2) as per 40 CFR §60.560(h).

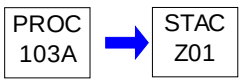
***** Permit Shield in Effect. *****

SECTION D. Source Level Requirements

Source ID: 103A Source Name: PLANT 1 FUGITIVE SOURCES

Source Capacity/Throughput: N/A fugitives

Conditions for this source occur in the following groups: GROUP 1



I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The Volatile Organic Compounds (VOC) emissions from the fugitive emission sources of Plant 1 shall not exceed 19.60 tons per year on a twelve (12) month rolling basis.

II. TESTING REQUIREMENTS.

 # 002 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.485]

Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry

Test methods and procedures.

[Additional authority for this permit condition is derived from 40 CFR §60.562-2(d) and 25 Pa. Code §129.71.]

(a) In conducting the performance tests required in 40 CFR §60.8, the permittee shall use as reference methods and procedures the test methods in appendix A of 40 CFR part 60 or other methods and procedures as specified in 40 CFR §60.485, except as provided in 40 CFR §60.8(b).

(b) The permittee shall determine compliance with the standards in 40 CFR §§60.482-1 through 60.482-10, and 60.484 as follows:

(1) Method 21 shall be used to determine the presence of leaking sources. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21. The following calibration gases shall be used:

(i) Zero air (less than 10 ppm of hydrocarbon in air); and

(ii) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane.

(c) The permittee shall determine compliance with the no detectable emission standards in 40 CFR §§60.482-2(e), 60.482-3(i), 60.482-4, 60.482-7(f), and 60.482-10(e) as follows:

(1) The requirements of paragraph (b) shall apply.

(2) Method 21 shall be used to determine the background level. All potential leak interfaces shall be traversed as close to the interface as possible. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.

(d) The permittee shall test each piece of equipment unless the permittee demonstrates that a process unit is not in VOC service, i.e., that the VOC content would never be reasonably expected to exceed 10 percent by weight. For purposes of this demonstration, the following methods and procedures shall be used:

(1) Procedures that conform to the general methods in ASTM E260-73, 91, or 96, E168-67, 77, or 92, E169-63, 77, or 93 (incorporated by reference—see 40 CFR §60.17) shall be used to determine the percent VOC content in the process fluid that is contained in or contacts a piece of equipment.

SECTION D. Source Level Requirements

(2) Organic compounds that are considered by the Administrator to have negligible photochemical reactivity may be excluded from the total quantity of organic compounds in determining the VOC content of the process fluid.

(3) Engineering judgment may be used to estimate the VOC content, if a piece of equipment had not been shown previously to be in service. If the Administrator disagrees with the judgment, 40 CFR §60.485(d)(1) and (2) shall be used to resolve the disagreement.

(e) The permittee shall demonstrate that a piece of equipment is in light liquid service by showing that all the following conditions apply:

(1) The vapor pressure of one or more of the organic components is greater than 0.3 kPa at 20 °C (1.2 in. H2O at 68 °F). Standard reference texts or ASTM D2879-83, 96, or 97 (incorporated by reference—see 40 CFR §60.17) shall be used to determine the vapor pressures.

(2) The total concentration of the pure organic components having a vapor pressure greater than 0.3 kPa at 20 °C (1.2 in. H2O at 68 °F) is equal to or greater than 20 percent by weight.

(3) The fluid is a liquid at operating conditions.

(f) Samples used in conjunction with 40 CFR §60.485(d), (e), and (g) shall be representative of the process fluid that is contained in or contacts the equipment.

III. MONITORING REQUIREMENTS.

 # 003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-2]

Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry

Standards: Pumps in light liquid service.

[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]

(a)(1) Each pump in light liquid service shall be monitored monthly to detect leaks by the methods specified in 40 CFR §60.485(b), except as provided in 40 CFR §60.482-1(c) and (f) and 40 CFR §60.482-2(d), (e) and (f). A pump that begins operation in light liquid service after the initial startup date for the process unit must be monitored for the first time within 30 days after the end of its startup period, except for a pump that replaces a leaking pump and except as provided in 40 CFR §60.482-1(c) and (f), and 40 CFR §60.482-2(d), (e) and (f).

(2) Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal, except as provided in 40 CFR §60.482-1(f).

(b)(1) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
(2) If there are indications of liquids dripping from the pump seal, the permittee shall follow the procedure specified in 40 CFR §60.482-2(b)(2)(i) or (ii) . This requirement does not apply to a pump that was monitored after a previous weekly inspection if the instrument reading for that monitoring event was less than 10,000 ppm and the pump was not repaired since that monitoring event.

(i) Monitor the pump within 5 days as specified in 40 CFR §60.485(b). If an instrument reading of 10,000 ppm or greater is measured, a leak is detected. The leak shall be repaired using the procedures in 40 CFR §60.482-2(c).
(ii) Designate the visual indications of liquids dripping as a leak, and repair the leak within 15 days of detection by eliminating the visual indications of liquids dripping.

(c)(1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR §60.482-9.

(2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. First attempts at repair include, but are not limited to, the practices described in 40 CFR §60.482-2(c)(2)(i) and (ii), where practicable.

SECTION D. Source Level Requirements

(i) Tightening the packing gland nuts;

(ii) Ensuring that the seal flush is operating at design pressure and temperature.

(d) Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of paragraph (a) of this section, provided the requirements specified in 40 CFR §60.482-2(d)(1) through (6) are met.

(1) Each dual mechanical seal system is—

(i) Operated with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressure; or

(ii) Equipped with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed vent system to a control device that complies with the requirements of 40 CFR §60.482-10; or

(iii) Equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions to the atmosphere.

(2) The barrier fluid system is in heavy liquid service or is not in VOC service.

(3) Each barrier fluid system is equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both.

(4)(i) Each pump is checked by visual inspection, each calendar week, for indications of liquids dripping from the pump seals.

(ii) If there are indications of liquids dripping from the pump seal at the time of the weekly inspection, the permittee shall follow the procedure specified in 40 CFR §60.482-2(d)(4)(ii)(A) or (B).

(A) Monitor the pump within 5 days as specified in 40 CFR §60.485(b) to determine if there is a leak of VOC in the barrier fluid. If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(B) Designate the visual indications of liquids dripping as a leak.

(5)(i) Each sensor as described in 40 CFR §60.482-2(d)(3) is checked daily or is equipped with an audible alarm.

(ii) The permittee determines, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.

(iii) If the sensor indicates failure of the seal system, the barrier fluid system, or both, based on the criterion established in 40 CFR §60.482-2(d)(5)(ii), a leak is detected.

(6)(i) When a leak is detected pursuant to 40 CFR §60.482-2(d)(4)(ii)(A), it shall be repaired as specified in 40 CFR §60.482-2(c).

(ii) A leak detected pursuant to 40 CFR §60.482-2(d)(5)(iii) shall be repaired within 15 days of detection by eliminating the conditions that activated the sensor.

(iii) A designated leak pursuant to 40 CFR §60.482-2(d)(4)(ii)(B) shall be repaired within 15 days of detection by eliminating visual indications of liquids dripping.

(e) Any pump that is designated, as described in 40 CFR §60.486(e)(1) and (2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of 40 CFR §60.482-2(a), (c), and (d) if the pump:

(1) Has no externally actuated shaft penetrating the pump housing,

SECTION D. Source Level Requirements

(2) Is demonstrated to be operating with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background as measured by the methods specified in 40 CFR §60.485(c), and

(3) Is tested for compliance with 40 CFR §60.482-2(e)(2) initially upon designation, annually, and at other times requested by the Administrator.

(f) If any pump is equipped with a closed vent system capable of capturing and transporting any leakage from the seal or seals to a process or to a fuel gas system or to a control device that complies with the requirements of 40 CFR §60.482-10, it is exempt from 40 CFR §60.482-2(a) through (e).

(g) Any pump that is designated, as described in 40 CFR §60.486(f)(1), as an unsafe-to-monitor pump is exempt from the monitoring and inspection requirements of 40 CFR §60.482-2(a) and (d)(4) through (6) if:

(1) The permittee demonstrates that the pump is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR §60.482-2(a); and
(2) The permittee has a written plan that requires monitoring of the pump as frequently as practicable during safe-to-monitor times but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in 40 CFR §60.482-2(c) if a leak is detected.

(h) Any pump that is located within the boundary of an unmanned plant site is exempt from the weekly visual inspection requirement of 40 CFR §60.482-2(a)(2) and (d)(4), and the daily requirements of 40 CFR §60.482-2(d)(5) , provided that each pump is visually inspected as often as practicable and at least monthly.

 # 004 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-7]

Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry

Standards: Valves in gas/vapor service and in light liquid service.

[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]

(a)(1) Each valve shall be monitored monthly to detect leaks by the methods specified in 40 CFR §60.485(b) and shall comply with 40 CFR §60.482-7(b) through (e), except as provided in 40 CFR §§60.482-7(f), (g), and (h), and 40 CFR §60.482-1(c) and (f).

(2) A valve that begins operation in gas/vapor service or light liquid service after the initial startup date for the process unit must be monitored according to 40 CFR §60.482-7(a)(2)(i), except for a valve that replaces a leaking valve and except as provided in 40 CFR §§60.482-7(f), (g), and (h), and 60.482-1(c).

(i) Monitor the valve as in 40 CFR §60.482-7(a)(1). The valve must be monitored for the first time within 30 days after the end of its startup period to ensure proper installation.

(b) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(c)(1)(i) Any valve for which a leak is not detected for 2 successive months may be monitored the first month of every quarter,beginning with the next quarter, until a leak is detected.

(ii) As an alternative to monitoring all of the valves in the first month of a quarter, the permittee may elect to subdivide the process unit into 2 or 3 subgroups of valves and monitor each subgroup in a different month during the quarter, provided each subgroup is monitored every 3 months. The permittee must keep records of the valves assigned to each subgroup.

(2) If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months.
(d)(1) When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in 40 CFR §60.482-9.

(2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(e) First attempts at repair include, but are not limited to, the following best practices where practicable:

SECTION D. Source Level Requirements

(1) Tightening of bonnet bolts;

(2) Replacement of bonnet bolts;
(3) Tightening of packing gland nuts;

(4) Injection of lubricant into lubricated packing.

(f) Any valve that is designated, as described in 40 CFR §60.486(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of 40 CFR §60.482-7(a) if thevalve:

(1) Has no external actuating mechanism in contact with the process fluid,

(2) Is operated with emissions less than 500 ppm above background as determined by the method specified in 40 CFR §60.485(c), and

(3) Is tested for compliance with 40 CFR §60.482-7(f)(2) initially upon designation, annually, and at other times requested bythe Administrator.

(g) Any valve that is designated, as described in 40 CFR §60.486(f)(1), as an unsafe-to-monitor valve is exempt from the requirements of 40 CFR §60.482-7(a) if:

(1) The permittee demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR §60.482-7(a), and

(2) The permittee adheres to a written plan that requires monitoring of the valve as frequently as practicable during safe-tomonitor times.

(h) Any valve that is designated, as described in 40 CFR §60.486(f)(2), as a difficult-to-monitor valve is exempt from the requirements of 40 CFR §60.482-7(a) if:

(1) The permittee demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface.

(2) The process unit within which the valve is located either becomes an affected facility through 40 CFR §60.14 or §60.15 or the permittee designates less than 3.0 percent of the total number of valves as difficult-to-monitor, and

(3) The permittee follows a written plan that requires monitoring of the valve at least once per calendar year.

IV. RECORDKEEPING REQUIREMENTS.

 # 005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall keep records of the LDAR component monitoring.

 # 006 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.486]

Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry

Recordkeeping requirements.

[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(e) and 25 Pa. Code §129.71.]

(a)(1) The permittee shall comply with the recordkeeping requirements of 40 CFR §60.486.

(2) The permittee may comply with the recordkeeping requirements for the sources in one recordkeeping system if the system identifies each record by each source.

SECTION D. Source Level Requirements

(b) When each leak is detected as specified in 40 CFR §§60.482-2, 60.482-3, 60.482-7, and 60.482-8, the following requirements apply:

(1) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.

(2) The identification on a valve may be removed after it has been monitored for 2 successive months as specified in 40 CFR §60.482-7(c) and no leak has been detected during those 2 months.

(3) The identification on equipment except on a valve, may be removed after it has been repaired.

(c) When each leak is detected as specified in 40 CFR §§60.482-2, 60.482-3, 60.482-7, and 60.482-8, the following information shall be recorded in a log and shall be kept for 2 years in a readily accessible location:

(1) The instrument and operator identification numbers and the equipment identification number.

(2) The date the leak was detected and the dates of each attempt to repair the leak.

(3) Repair methods applied in each attempt to repair the leak.

(4) “Above 10,000” if the maximum instrument reading measured by the methods specified in 40 CFR §60.485(a) after eachrepair attempt is equal to or greater than 10,000 ppm.

(5) “Repair delayed” and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.

(6) The signature of the permittee (or designate) whose decision it was that repair could not be effected without a process shutdown.

(7) The expected date of successful repair of the leak if a leak is not repaired within 15 days.

(8) Dates of process unit shutdowns that occur while the equipment is unrepaired.

(9) The date of successful repair of the leak.

(d) The following information pertaining to the design requirements for closed vent systems and control devices described in 40 CFR §60.482-10 shall be recorded and kept in a readily accessible location:

(1) Detailed schematics, design specifications, and piping and instrumentation diagrams.

(2) The dates and descriptions of any changes in the design specifications.

(3) A description of the parameter or parameters monitored, as required in 40 CFR §60.482-10(e), to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring.

(4) Periods when the closed vent systems and control devices required in 40 CFR §§60.482-2, 60.482-3, 60.482-4, and 60.482-5 are not operated as designed, including periods when a flare pilot light does not have a flame.

(5) Dates of startups and shutdowns of the closed vent systems and control devices required in 40 CFR §§60.482-2, 60.482-3, 60.482-4, and 60.482-5.

(e) The following information pertaining to all equipment subject to the requirements in 40 CFR §§60.482-1 to 60.482-10 shall be recorded in a log that is kept in a readily accessible location:

(1) A list of identification numbers for equipment subject to the requirements of 40 CFR 60 Subpart VV.

SECTION D. Source Level Requirements

(2)(i) A list of identification numbers for equipment that are designated for no detectable emissions under the provisions of 40 CFR §§60.482-2(e), 60.482-3(i) and 60.482-7(f).

(ii) The designation of equipment as subject to the requirements of 40 CFR §§60.482-2(e), 60.482-3(i), or 60.482-7(f) shall be signed by the permittee.

(3) A list of equipment identification numbers for pressure relief devices required to comply with 40 CFR §60.482-4.

(4)(i) The dates of each compliance test as required in 40 CFR §§60.482-2(e), 60.482-3(i), 60.482-4, and 60.482-7(f).

(ii) The background level measured during each compliance test.

(iii) The maximum instrument reading measured at the equipment during each compliance test.

(5) A list of identification numbers for equipment in vacuum service.

(6) A list of identification numbers for equipment that the permittee designates as operating in VOC service less than 300 hr/yr in accordance with 40 CFR §60.482-1(e), a description of the conditions under which the equipment is in VOC service, and rationale supporting the designation that it is in VOC service less than 300 hr/yr.

(f) The following information pertaining to all valves subject to the requirements of 40 CFR §60.482-7(g) and (h) and to all pumps subject to the requirements of 40 CFR §60.482-2(g) shall be recorded in a log that is kept in a readily accessible location:

(1) A list of identification numbers for valves and pumps that are designated as unsafe-to-monitor, an explanation for each valve or pump stating why the valve or pump is unsafe-to-monitor, and the plan for monitoring each valve or pump.

(2) A list of identification numbers for valves that are designated as difficult-to-monitor, an explanation for each valve stating why the valve is difficult-to-monitor, and the schedule for monitoring each valve.

(g) As per 40 CFR §60.486(h), the following information shall be recorded in a log that is kept in a readily accessible location:

(1) Design criterion required in 40 CFR §§60.482-2(d)(5) and explanation of the design criterion; and

(2) Any changes to this criterion and the reasons for the changes.

(h) As per 40 CFR §60.486(i), the following information shall be recorded in a log that is kept in a readily accessible locationfor use in determining exemptions as provided in 40 CFR §60.480(d):

(1) An analysis demonstrating the design capacity of the affected facility,

(2) A statement listing the feed or raw materials and products from the affected facilities and an analysis demonstrating whether these chemicals are heavy liquids or beverage alcohol, and

(3) An analysis demonstrating that equipment is not in VOC service.

(i) As per 40 CFR §60.486(j), information and data used to demonstrate that a piece of equipment is not in VOC service shall be recorded in a log that is kept in a readily accessible location.

(j) As per 40 CFR §60.486(k), the provisions of 40 CFR §60.7(b) and (d) do not apply to affected facilities subject to 40 CFR 60 Subpart VV.

SECTION D. Source Level Requirements

V. REPORTING REQUIREMENTS.

 # 007 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.487]

Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry

Reporting requirements.

[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(e) and 25 Pa. Code §129.71.]

(a) All semiannual reports to DEP shall include the following information, summarized from the information in 40 CFR §60.486:

(1) Process unit identification.

(2) For each month during the semiannual reporting period,

(i) Number of valves for which leaks were detected as described in 40 CFR §60.482-7(b),

(ii) Number of valves for which leaks were not repaired as required in 40 CFR §60.482-7(d)(1),

(iii) Number of pumps for which leaks were detected as described in 40 CFR §60.482-2(b), (d)(4)(ii)(A) or (B), or (d)(5)(iii),

(iv) Number of pumps for which leaks were not repaired as required in 40 CFR §60.482-2(c)(1) and (d)(6),

(v) Number of compressors for which leaks were detected as described in 40 CFR §60.482-3(f),

(vi) Number of compressors for which leaks were not repaired as required in 40 CFR §60.482-3(g)(1), and

(vii) The facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible.

(3) Dates of process unit shutdowns which occurred within the semiannual reporting period.

(4) Revisions to items reported according to paragraph (b) if changes have occurred since the initial report or subsequent revisions to the initial report.

(b) The permittee shall report the results of all performance tests in accordance with 40 CFR §60.8. The provisions of 40 CFR §60.8(d) do not apply to affected facilities subject to the provisions of this subpart except that the permittee must notify DEP of the schedule for the performance tests at least 30 days before the performance tests.

(c) The requirements of 40 CFR §60.487(a) through (c) remain in force until and unless EPA, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such State. In that event, affected sources within the State will be relieved of the obligation to comply with the requirements of 40 CFR §60.487(a) through (c), provided that they comply with the requirements established by the State.

VI. WORK PRACTICE REQUIREMENTS.

 # 008 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-1]

Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry

Standards: General.

[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]

(a) The permittee shall demonstrate compliance with the requirements of 40 CFR §§60.482-1 through 60.482-10 or §60.480(e) for all equipment.

(b) Compliance with 40 CFR §§60.482-1 to 60.482-10 will be determined by review of records and reports, review of

performance test results, and inspection using the methods and procedures specified in 40 CFR §60.485.

(c) As per 40 CFR §60.482-1(d), equipment that is in vacuum service is excluded from the requirements of 40 CFR §§ 60.482-2 to 60.482-10 if it is identified as required in 40 CFR § 60.486(e)(5).

 # 009 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-10]

Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry

Standards: Closed vent systems and control devices.

[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]

(a) Closed vent systems and control devices must comply with the respective provisions specified in 40 CFR § 60.482-10.

(b) As per 40 CFR §60.482-10(f), except as provided in 40 CFR §60.482-1(i) through (k), each closed vent system shall be inspected according to the procedures and schedule specified in paragraphs (1) and (2) below.

(1) If the vapor collection system or closed vent system is constructed of hard-piping, the permittee shall comply with the requirements specified in paragraphs (i) and (ii) below:

(i) Conduct an initial inspection according to the procedures in 40 CFR §60.485(b); and

(ii) Conduct annual visual inspections for visible, audible, or olfactory indications of leaks.

(2) If the vapor collection system or closed vent system is constructed of ductwork, the permittee shall:

(i) Conduct an initial inspection according to the procedures in 40 CFR §60.485(b); and

(ii) Conduct annual inspections according to the procedures in 40 CFR §60.485(b).

(c) As per 40 CFR §60.482-10(g), leaks, as indicated by an instrument reading greater than 500 parts per million by volume above background or by visual inspections, shall be repaired as soon as practicable except as provided in 40 CFR §60.482-10(h).

(1) A first attempt at repair shall be made no later than 5 calendar days after the leak is detected.

(2) Repair shall be completed no later than 15 calendar days after the leak is detected.

(d) As per 40 CFR §60.482-10(h), delay of repair of a closed vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown or if the permittee determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be complete by the end of the next process unit shutdown.

(e) As per 40 CFR §60.482-10(i), if a vapor collection system or closed vent system is operated under a vacuum, it is exemptfrom the inspection requirements of 40 CFR §60.482-10(f)(1)(i) and (f)(2) .

(f) As per 40 CFR §60.482-10(j), any parts of the closed vent system that are designated, as described in paragraph (l)(1) of 40 CFR §60.482-10, as unsafe to inspect are exempt from the inspection requirements of 40 CFR §60.482-10(f)(1)(i) and (f)(2) if they comply with the requirements specified in 40 CFR §60.482-10(j)(1) and (2) :

(1) The permittee determines that the equipment is unsafe to inspect because inspecting personnel would be exposed to an imminent or potential danger as a consequence of complying with 40 CFR §60.482-10(f)(1)(i) or (f)(2); and

(2) The permittee has a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times.

(g) As per 40 CFR §60.482-10(k), any parts of the closed vent system that are designated, as described in 40 CFR §60.482-

SECTION D. Source Level Requirements

10(l)(2), as difficult to inspect are exempt from the inspection requirements of 40 CFR §60.482-10(f)(1)(i) and (f)(2) if they comply with the requirements specified in 40 CFR §60.482-10(k)(1) through (3):

(1) The permittee determines that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters above a support surface; and

(2) The process unit within which the closed vent system is located becomes an affected facility through 40 CFR §§60.14 or 60.15, or the permittee designates less than 3.0 percent of the total number of closed vent system equipment as difficult to inspect; and

(3) The permittee has a written plan that requires inspection of the equipment at least once every 5 years. A closed vent system is exempt from inspection if it is operated under a vacuum. (h) As per 40 CFR §60.482-10(l), the permittee shall record the information specified in 40 CFR §60.482-10(l)(1) through (5).

(1) Identification of all parts of the closed vent system that are designated as unsafe to inspect, an explanation of why the equipment is unsafe to inspect, and the plan for inspecting the equipment.

(2) Identification of all parts of the closed vent system that are designated as difficult to inspect, an explanation of why the equipment is difficult to inspect, and the plan for inspecting the equipment.
(3) For each inspection during which a leak is detected, a record of the information specified in 40 CFR §60.486(c).
(4) For each inspection conducted in accordance with 40 CFR §60.485(b) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.
(5) For each visual inspection conducted in accordance with 40 CFR §60.482-10(f)(1)(ii) during which no leaks are detected,a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.

(i) As per 40 CFR §60.482-10(m), closed vent systems and the flares shall be operated at all times when emissions may be vented to them.

 # 010 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-3]

Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry

Compressors.

[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]

(a) Each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of VOC to the atmosphere, except as provided in 40 CFR §60.482-1(c) and 40 CFR §60.482-3(h), (i), and (j).

(b) Each compressor seal system as required in paragraph (a) above shall be:

(1) Operated with the barrier fluid at a pressure that is greater than the compressor stuffing box pressure; or

(2) Equipped with a barrier fluid system degassing reservoir that is routed to a process or fuel gas system or connected by a closed vent system to a control device that complies with the requirements of 40 CFR §60.482-10; or

(3) Equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions to the atmosphere.

(c) The barrier fluid system shall be in heavy liquid service or shall not be in VOC service.

(d) Each barrier fluid system as described in 40 CFR §60.482-3(a) shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both.

(e)(1) Each sensor as required in paragraph (d) above shall be checked daily or shall be equipped with an audible alarm.

(2) The permittee shall determine, based on design considerations and operating experience, a criterion that indicates

SECTION D. Source Level Requirements

failure of the seal system, the barrier fluid system, or both.

(f) If the sensor indicates failure of the seal system, the barrier system, or both based on the criterion determined under 40 CFR §60.482-3(e)(2), a leak is detected.

(g)(1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR §60.482-9.

(2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(h) A compressor is exempt from the requirements of 40 CFR §60.482-3(a) and (b), if it is equipped with a closed vent system to capture and transport leakage from the compressor drive shaft back to a process or fuel gas system or to a control device that complies with the requirements of 40 CFR §60.482-10, except as provided in 40 CFR §60.482-3(i).

(i) Any compressor that is designated, as described in 40 CFR §60.486(e)(1) and (2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of 40 CFR §60.482-3(a)-(h) if the compressor:

(1) Is demonstrated to be operating with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the methods specified in 40 CFR §60.485(c); and

(2) Is tested for compliance with 40 CFR §60.482-3(i)(1) initially upon designation, annually, and at other times requested byDEP.

(j) Any existing reciprocating compressor in a process unit which becomes an affected facility under provisions of 40 CFR §60.14 or §60.15 is exempt from 40 CFR §60.482-3(a) through (e) and (h), provided the permittee demonstrates that recasting the distance piece or replacing the compressor are the only options available to bring the compressor into compliance with the provisions of 40 CFR §60.482-3(a) through (e) and (h).

 # 011 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-4]

Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry

Standards: Pressure relief devices in gas/vapor service.

[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]

(a) Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as determined by the methods specified in 40 CFR §60.485(c).

(b)(1) After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after the pressure release, except as provided in 40 CFR §60.482-9.

(2) No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the conditions of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, by the methods specified in 40 CFR §60.485(c).

(c) Any pressure relief device that is routed to a process or fuel gas system or equipped with a closed vent system capable of capturing and transporting leakage through the pressure relief device to a control device as described in 40 CFR §60.482-10 is exempted from the requirements of 40 CFR §60.482-4(a) and (b).

(d)(1) Any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the requirements of 40 CFR §60.482-4(a) and (b) , provided the permittee complies with the requirements in 40 CFR §60.482-4(d)(2).

(2) After each pressure release, a new rupture disk shall be installed upstream of the pressure relief device as soon as

SECTION D. Source Level Requirements

practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR §60.482-9.

 # 012 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-5]

Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry

Standards: Sampling connection systems.

[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]

(a) Each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system, except as provided in 40 CFR §60.482-1(c) and 40 CFR §60.482-5(c).

(b) Each closed-purge, closed-loop, or closed-vent system as required in 40 CFR §60.482-5(a) shall comply with the requirements specified in paragraphs (1) through (4) below.

(1) Gases displaced during filling of the sample container are not required to be collected or captured.

(2) Containers that are part of a closed-purge system must be covered or closed when not being filled or emptied.

(3) Gases remaining in the tubing or piping between the closed-purge system valve(s) and sample container valve(s) after the valves are closed and the sample container is disconnected are not required to be collected or captured.

(4) Each closed-purge, closed-loop, or closed-vent system shall be designed and operated to meet requirements in either paragraph (i), (ii), (iii), or (iv) below.

(i) Return the purged process fluid directly to the process line.

(ii) Collect and recycle the purged process fluid to a process.

(iii) Capture and transport all the purged process fluid to a control device that complies with the requirements of 40 CFR §60.482-10.

(iv) Collect, store, and transport the purged process fluid to any of the following systems or facilities:

(A) A waste management unit as defined in 40 CFR §63.111, if the waste management unit is subject to and operated in compliance with the provisions of 40 CFR 63, subpart G, applicable to Group 1 wastewater streams;

(B) A treatment, storage, or disposal facility subject to regulation under 40 CFR parts 262, 264, 265, or 266;

(C) A facility permitted, licensed, or registered by a state to manage municipal or industrial solid waste, if the process fluids are not hazardous waste as defined in 40 CFR 261;

(D) A waste management unit subject to and operated in compliance with the treatment requirements of 40 CFR §61.348(a), provided all waste management units that collect, store, or transport the purged process fluid to the treatment unit are subject to and operated in compliance with the management requirements of 40 CFR §§61.343 through 61.347; or

(E) A device used to burn off-specification used oil for energy recovery in accordance with 40 CFR 279, subpart G, provided the purged process fluid is not hazardous waste as defined in 40 CFR 261.

(c) In situ sampling systems and sampling systems without purges are exempt from the requirements of paragraphs (a) and (b) of 40 CFR §60.482-5.

 # 013 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-6]

Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry

SECTION D. Source Level Requirements

Standards: Open-ended valves or lines.

[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]

(a)(1) Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in 40 CFR §60.482-1(c) and 40 CFR §60.482-6(d) and (e).

(2) The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line.

(b) Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed.

(c) When a double block-and-bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with 40 CFR §60.482-6(a) at all other times.

(d) Open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset are exempt from the requirements of 40 CFR §60.482-6(a), (b) and (c).

(e) Open-ended valves or lines containing materials which would autocatalytically polymerize or would present an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system as specified in 40 CFR §60.482-6(a) through (c) are exempt from the requirements of 40 CFR §60.482-6(a) through (c).

 # 014 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-8]

Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry

Standards: Pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors.

[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]

(a) If evidence of a potential leak is found by visual, audible, olfactory, or any other detection method at pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors, the permittee shall follow either one of the following procedures:

(1) The permittee shall monitor the equipment within 5 days by the method specified in 40 CFR §60.485(b) and shall comply with the requirements of 40 CFR §60.482-8(b) through (d).

(2) The permittee shall eliminate the visual, audible, olfactory, or other indication of a potential leak within 5 calendar days of detection.

(b) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(c)(1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR §60.482-9.

(2) The first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(d) First attempts at repair include, but are not limited to, the best practices described under 40 CFR §§60.482-2(c)(2) and 60.482-7(e).

VII. ADDITIONAL REQUIREMENTS.

 # 015 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-9]

Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry

Standards: Delay of repair.

SECTION D. Source Level Requirements

[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]

(a) Delay of repair of equipment for which leaks have been detected will be allowed if repair within 15 days is technically infeasible without a process unit shutdown. Repair of this equipment shall occur before the end of the next process unit shutdown. Monitoring to verify repair must occur within 15 days after startup of the process unit.

(b) Delay of repair of equipment will be allowed for equipment which is isolated from the process and which does not remain in VOC service.

(c) Delay of repair for valves will be allowed if:

(1) The permittee demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair, and

(2) When repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with 40 CFR §60.482-10.

(d) Delay of repair for pumps will be allowed if:

(1) Repair requires the use of a dual mechanical seal system that includes a barrier fluid system, and

(2) Repair is completed as soon as practicable, but not later than 6 months after the leak was detected.

(e) Delay of repair beyond a process unit shutdown will be allowed for a valve, if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the next process unit shutdown will not be allowed unless the next process unit shutdown occurs sooner than 6 months after the first process unit shutdown.

(f) When delay of repair is allowed for a leaking pump or valve that remains in service, the pump or valve may be considered to be repaired and no longer subject to delay of repair requirements if two consecutive monthly monitoring instrument readings are below the leak definition.

 # 016 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.562-2]

Subpart DDD - Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry

Standards: Equipment leaks of VOC.

[Additional authority for this permit condition is also derived from 40 CFR §60.562-2 and 25 Pa. Code §§127.512(h) and 129.71.]

(a) As per 40 CFR §60.562-2(a), the permittee shall comply with the requirements specified in 40 CFR §§60.482-1 through 60.482-10.

(b) As per 40 CFR §60.562-2(d), the permittee shall comply with the provisions specified in 40 CFR §60.485.

(c) As per 40 CFR §60.562-2(e), The permittee shall comply with 40 CFR §§60.486 and 60.487.

***** Permit Shield in Effect. *****

SECTION D. Source Level Requirements

Source ID: 103B Source Name: PLANT 2 FUGITIVE SOURCES

Source Capacity/Throughput: N/A fugitives

PROC 103B → STAC Z02

I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512(h).]

(a) The combined Volatile Organic Compounds (VOC) emissions from the Polypropylene Plant No.2 shall not exceed 24.30 tons per year on a twelve (12) month rolling basis.

(b) The combined Particulate Matter (PM) emissions from the Polypropylene Plant No.2 shall be less than 7.10 tons per yearon a twelve (12) month rolling basis.

(c) The polypropylene Plant No.2 consists of:
Source 101B - Three Storage Silos
Source 102B - Polypropylene Mfg. Sources
Source 103B - Fugitive Sources

II. TESTING REQUIREMENTS.

 # 002 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.485]

Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry

Test methods and procedures.

[Additional authority for this permit condition is derived from 40 CFR §60.562-2(d) and 25 Pa. Code §129.71.]

(a) In conducting the performance tests required in 40 CFR §60.8, the permittee shall use as reference methods and procedures the test methods in appendix A of 40 CFR part 60 or other methods and procedures as specified in 40 CFR §60.485, except as provided in 40 CFR §60.8(b).

(b) The permittee shall determine compliance with the standards in 40 CFR §§60.482-1 through 60.482-10, and 60.484 as follows:

(1) Method 21 shall be used to determine the presence of leaking sources. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21. The following calibration gases shall be used:

(i) Zero air (less than 10 ppm of hydrocarbon in air); and

(ii) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane.

(c) The permittee shall determine compliance with the no detectable emission standards in 40 CFR §§60.482-2(e), 60.482-3(i), 60.482-4, 60.482-7(f), and 60.482-10(e) as follows:

(1) The requirements of paragraph (b) shall apply.

(2) Method 21 shall be used to determine the background level. All potential leak interfaces shall be traversed as close to the interface as possible. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.

SECTION D. Source Level Requirements

(d) The permittee shall test each piece of equipment unless the permittee demonstrates that a process unit is not in VOC service, i.e., that the VOC content would never be reasonably expected to exceed 10 percent by weight. For purposes of this demonstration, the following methods and procedures shall be used:

(1) Procedures that conform to the general methods in ASTM E260-73, 91, or 96, E168-67, 77, or 92, E169-63, 77, or 93 (incorporated by reference—see 40 CFR §60.17) shall be used to determine the percent VOC content in the process fluid that is contained in or contacts a piece of equipment.

(2) Organic compounds that are considered by the Administrator to have negligible photochemical reactivity may be excluded from the total quantity of organic compounds in determining the VOC content of the process fluid.

(3) Engineering judgment may be used to estimate the VOC content, if a piece of equipment had not been shown previously to be in service. If the Administrator disagrees with the judgment, 40 CFR §60.485(d)(1) and (2) shall be used to resolve the disagreement.

(e) The permittee shall demonstrate that a piece of equipment is in light liquid service by showing that all the following conditions apply:

(1) The vapor pressure of one or more of the organic components is greater than 0.3 kPa at 20 °C (1.2 in. H2O at 68 °F). Standard reference texts or ASTM D2879-83, 96, or 97 (incorporated by reference—see 40 CFR §60.17) shall be used to determine the vapor pressures.

(2) The total concentration of the pure organic components having a vapor pressure greater than 0.3 kPa at 20 °C (1.2 in. H2O at 68 °F) is equal to or greater than 20 percent by weight.

(3) The fluid is a liquid at operating conditions.

(f) Samples used in conjunction with 40 CFR §60.485(d), (e), and (g) shall be representative of the process fluid that is contained in or contacts the equipment.

III. MONITORING REQUIREMENTS.

 # 003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code Section 127.511.]

(a) The permittee shall monitor the polypropylene production on a monthly and on a 12-month rolling basis

(b) Monitoring of components shall be conducted in accordance with 40 CFR Part 60 Subpart VV.

(c) The permittee shall calculate the VOC emissions on a monthly and on a 12-month rolling basis. Fugitive VOC emissions shall be calculated using procedures and criteria approved by the Department.

 # 004 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-2]

Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry

Standards: Pumps in light liquid service.

[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]

(a)(1) Each pump in light liquid service shall be monitored monthly to detect leaks by the methods specified in 40 CFR §60.485(b), except as provided in 40 CFR §60.482-1(c) and (f) and 40 CFR §60.482-2(d), (e) and (f). A pump that begins operation in light liquid service after the initial startup date for the process unit must be monitored for the first time within 30 days after the end of its startup period, except for a pump that replaces a leaking pump and except as provided in 40 CFR §60.482-1(c) and (f), and 40 CFR §60.482-2(d), (e) and (f).

(2) Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids

SECTION D. Source Level Requirements

dripping from the pump seal, except as provided in 40 CFR §60.482-1(f).

(b)(1) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(2) If there are indications of liquids dripping from the pump seal, the permittee shall follow the procedure specified in 40 CFR §60.482-2(b)(2)(i) or (ii) . This requirement does not apply to a pump that was monitored after a previous weekly inspection if the instrument reading for that monitoring event was less than 10,000 ppm and the pump was not repaired since that monitoring event.

(i) Monitor the pump within 5 days as specified in 40 CFR §60.485(b). If an instrument reading of 10,000 ppm or greater is measured, a leak is detected. The leak shall be repaired using the procedures in 40 CFR §60.482-2(c).

(ii) Designate the visual indications of liquids dripping as a leak, and repair the leak within 15 days of detection by eliminating the visual indications of liquids dripping.

(c)(1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR §60.482-9.

(2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. First attempts at repair include, but are not limited to, the practices described in 40 CFR §60.482-2(c)(2)(i) and (ii), where practicable.

(i) Tightening the packing gland nuts;

(ii) Ensuring that the seal flush is operating at design pressure and temperature.

(d) Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of paragraph (a) of this section, provided the requirements specified in 40 CFR §60.482-2(d)(1) through (6) are met.

(1) Each dual mechanical seal system is—

(i) Operated with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressure; or

(ii) Equipped with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed vent system to a control device that complies with the requirements of 40 CFR §60.482-10; or

(iii) Equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions to the atmosphere.

(2) The barrier fluid system is in heavy liquid service or is not in VOC service.

(3) Each barrier fluid system is equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both.

(4)(i) Each pump is checked by visual inspection, each calendar week, for indications of liquids dripping from the pump seals.

(ii) If there are indications of liquids dripping from the pump seal at the time of the weekly inspection, the permittee shall follow the procedure specified in 40 CFR §60.482-2(d)(4)(ii)(A) or (B).

(A) Monitor the pump within 5 days as specified in 40 CFR §60.485(b) to determine if there is a leak of VOC in the barrier fluid. If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(B) Designate the visual indications of liquids dripping as a leak.

(5)(i) Each sensor as described in 40 CFR §60.482-2(d)(3) is checked daily or is equipped with an audible alarm.

SECTION D. Source Level Requirements

(ii) The permittee determines, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.

(iii) If the sensor indicates failure of the seal system, the barrier fluid system, or both, based on the criterion established in 40 CFR §60.482-2(d)(5)(ii), a leak is detected.

(6)(i) When a leak is detected pursuant to 40 CFR §60.482-2(d)(4)(ii)(A), it shall be repaired as specified in 40 CFR §60.482-2(c).

(ii) A leak detected pursuant to 40 CFR §60.482-2(d)(5)(iii) shall be repaired within 15 days of detection by eliminating the conditions that activated the sensor.

(iii) A designated leak pursuant to 40 CFR §60.482-2(d)(4)

(ii)(B) shall be repaired within 15 days of detection by eliminating visual indications of liquids dripping.

(e) Any pump that is designated, as described in 40 CFR §60.486(e)(1) and (2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of 40 CFR §60.482-2(a), (c), and (d) if the pump:

(1) Has no externally actuated shaft penetrating the pump housing,

(2) Is demonstrated to be operating with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background as measured by the methods specified in 40 CFR §60.485(c), and

(3) Is tested for compliance with 40 CFR §60.482-2(e)(2) initially upon designation, annually, and at other times requested by the Administrator.

(f) If any pump is equipped with a closed vent system capable of capturing and transporting any leakage from the seal or seals to a process or to a fuel gas system or to a control device that complies with the requirements of 40 CFR §60.482-10, it is exempt from 40 CFR §60.482-2(a) through (e).

(g) Any pump that is designated, as described in 40 CFR §60.486(f)(1), as an unsafe-to-monitor pump is exempt from the monitoring and inspection requirements of 40 CFR §60.482-2(a) and (d)(4) through (6) if:

(1) The permittee demonstrates that the pump is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR §60.482-2(a); and

(2) The permittee has a written plan that requires monitoring of the pump as frequently as practicable during safe-to-monitor times but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in 40 CFR §60.482-2(c) if a leak is detected.

(h) Any pump that is located within the boundary of an unmanned plant site is exempt from the weekly visual inspection requirement of 40 CFR §60.482-2(a)(2) and (d)(4), and the daily requirements of 40 CFR §60.482-2(d)(5) , provided that each pump is visually inspected as often as practicable and at least monthly.

 # 005 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-7]

Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry

Standards: Valves in gas/vapor service and in light liquid service.

[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]

(a)(1) Each valve shall be monitored monthly to detect leaks by the methods specified in 40 CFR §60.485(b) and shall comply with 40 CFR §60.482-7(b) through (e), except as provided in 40 CFR §§60.482-7(f), (g), and (h), and 40 CFR §60.482-1(c) and (f).

SECTION D. Source Level Requirements

(2) A valve that begins operation in gas/vapor service or light liquid service after the initial startup date for the process unitmust be monitored according to 40 CFR §60.482-7(a)(2)(i), except for a valve that replaces a leaking valve and except as provided in 40 CFR §§60.482-7(f), (g), and (h), and 60.482-1(c).

(i) Monitor the valve as in 40 CFR §60.482-7(a)(1). The valve must be monitored for the first time within 30 days after the end of its startup period to ensure proper installation.

(b) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(c)(1)(i) Any valve for which a leak is not detected for 2 successive months may be monitored the first month of every quarter,beginning with the next quarter, until a leak is detected.

(ii) As an alternative to monitoring all of the valves in the first month of a quarter, the permittee may elect to subdivide the process unit into 2 or 3 subgroups of valves and monitor each subgroup in a different month during the quarter, provided each subgroup is monitored every 3 months. The permittee must keep records of the valves assigned to each subgroup.

(2) If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months.

(d)(1) When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in 40 CFR §60.482-9.

(2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(e) First attempts at repair include, but are not limited to, the following best practices where practicable:

(1) Tightening of bonnet bolts;

(2) Replacement of bonnet bolts;

(3) Tightening of packing gland nuts;

(4) Injection of lubricant into lubricated packing.

(f) Any valve that is designated, as described in 40 CFR §60.486(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of 40 CFR §60.482-7(a) if thevalve:

(1) Has no external actuating mechanism in contact with the process fluid,

(2) Is operated with emissions less than 500 ppm above background as determined by the method specified in 40 CFR §60.485(c), and

(3) Is tested for compliance with 40 CFR §60.482-7(f)(2) initially upon designation, annually, and at other times requested bythe Administrator.

(g) Any valve that is designated, as described in 40 CFR §60.486(f)(1), as an unsafe-to-monitor valve is exempt from the requirements of 40 CFR §60.482-7(a) if:

(1) The permittee demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR §60.482-7(a), and

(2) The permittee adheres to a written plan that requires monitoring of the valve as frequently as practicable during safe-tomonitor times.

(h) Any valve that is designated, as described in 40 CFR §60.486(f)(2), as a difficult-to-monitor valve is exempt from the requirements of 40 CFR §60.482-7(a) if:

SECTION D. Source Level Requirements

(1) The permittee demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface.

(2) The process unit within which the valve is located either becomes an affected facility through 40 CFR §60.14 or §60.15 or the permittee designates less than 3.0 percent of the total number of valves as difficult-to-monitor, and

(3) The permittee follows a written plan that requires monitoring of the valve at least once per calendar year.

IV. RECORDKEEPING REQUIREMENTS.

 # 006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall keep records of

(a) polypropylene production monthly and as a 12-month rolling sum;

(b) VOC emissions monthly and as a 12-month rolling sum.

(c) The LDAR component monitoring.

 # 007 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.486]

Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry

Recordkeeping requirements.

[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(e) and 25 Pa. Code §129.71.]

(a)(1) The permittee shall comply with the recordkeeping requirements of 40 CFR §60.486.

(2) The permittee may comply with the recordkeeping requirements for the sources in one recordkeeping system if the system identifies each record by each source.

(b) When each leak is detected as specified in 40 CFR §§60.482-2, 60.482-3, 60.482-7, and 60.482-8, the following requirements apply:

(1) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.

(2) The identification on a valve may be removed after it has been monitored for 2 successive months as specified in 40 CFR §60.482-7(c) and no leak has been detected during those 2 months.

(3) The identification on equipment except on a valve, may be removed after it has been repaired.

(c) When each leak is detected as specified in 40 CFR §§60.482-2, 60.482-3, 60.482-7, and 60.482-8, the following information shall be recorded in a log and shall be kept for 2 years in a readily accessible location:

(1) The instrument and operator identification numbers and the equipment identification number.

(2) The date the leak was detected and the dates of each attempt to repair the leak.

(3) Repair methods applied in each attempt to repair the leak.

(4) “Above 10,000” if the maximum instrument reading measured by the methods specified in 40 CFR §60.485(a) after eachrepair attempt is equal to or greater than 10,000 ppm.

(5) “Repair delayed” and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.

(6) The signature of the permittee (or designate) whose decision it was that repair could not be effected without a process shutdown.

(7) The expected date of successful repair of the leak if a leak is not repaired within 15 days.

(8) Dates of process unit shutdowns that occur while the equipment is unrepaired.

(9) The date of successful repair of the leak.

(d) The following information pertaining to the design requirements for closed vent systems and control devices described in 40 CFR §60.482-10 shall be recorded and kept in a readily accessible location:

(1) Detailed schematics, design specifications, and piping and instrumentation diagrams.

(2) The dates and descriptions of any changes in the design specifications.

(3) A description of the parameter or parameters monitored, as required in 40 CFR §60.482-10(e), to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring.

(4) Periods when the closed vent systems and control devices required in 40 CFR §§60.482-2, 60.482-3, 60.482-4, and 60.482-5 are not operated as designed, including periods when a flare pilot light does not have a flame.

(5) Dates of startups and shutdowns of the closed vent systems and control devices required in 40 CFR §§60.482-2, 60.482-3, 60.482-4, and 60.482-5.

(e) The following information pertaining to all equipment subject to the requirements in 40 CFR §§60.482-1 to 60.482-10 shall be recorded in a log that is kept in a readily accessible location:

(1) A list of identification numbers for equipment subject to the requirements of 40 CFR 60 Subpart VV.

(2)(i) A list of identification numbers for equipment that are designated for no detectable emissions under the provisions of 40 CFR §§60.482-2(e), 60.482-3(i) and 60.482-7(f).

(ii) The designation of equipment as subject to the requirements of 40 CFR §§60.482-2(e), 60.482-3(i), or 60.482-7(f) shall be signed by the permittee.

(3) A list of equipment identification numbers for pressure relief devices required to comply with 40 CFR §60.482-4.

(4)(i) The dates of each compliance test as required in 40 CFR §§60.482-2(e), 60.482-3(i), 60.482-4, and 60.482-7(f).

(ii) The background level measured during each compliance test.

(iii) The maximum instrument reading measured at the equipment during each compliance test.

(5) A list of identification numbers for equipment in vacuum service.

(6) A list of identification numbers for equipment that the permittee designates as operating in VOC service less than 300 hr/yr in accordance with 40 CFR §60.482-1(e), a description of the conditions under which the equipment is in VOC service, and rationale supporting the designation that it is in VOC service less than 300 hr/yr.

(f) The following information pertaining to all valves subject to the requirements of 40 CFR §60.482-7(g) and (h) and to all pumps subject to the requirements of 40 CFR §60.482-2(g) shall be recorded in a log that is kept in a readily accessible location:

(1) A list of identification numbers for valves and pumps that are designated as unsafe-to-monitor, an explanation for each

valve or pump stating why the valve or pump is unsafe-to-monitor, and the plan for monitoring each valve or pump.

(2) A list of identification numbers for valves that are designated as difficult-to-monitor, an explanation for each valve stating why the valve is difficult-to-monitor, and the schedule for monitoring each valve.

(g) As per 40 CFR §60.486(h), the following information shall be recorded in a log that is kept in a readily accessible location:

(1) Design criterion required in 40 CFR §§60.482-2(d)(5) and explanation of the design criterion; and

(2) Any changes to this criterion and the reasons for the changes.

(h) As per 40 CFR §60.486(i), the following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in 40 CFR §60.480(d):

(1) An analysis demonstrating the design capacity of the affected facility,

(2) A statement listing the feed or raw materials and products from the affected facilities and an analysis demonstrating whether these chemicals are heavy liquids or beverage alcohol, and

(3) An analysis demonstrating that equipment is not in VOC service.

(i) As per 40 CFR §60.486(j), information and data used to demonstrate that a piece of equipment is not in VOC service shall be recorded in a log that is kept in a readily accessible location.

(j) As per 40 CFR §60.486(k), the provisions of 40 CFR §60.7(b) and (d) do not apply to affected facilities subject to 40 CFR 60 Subpart VV.

V. REPORTING REQUIREMENTS.

 # 008 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.487]

Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry

Reporting requirements.

Additional authority for this permit condition is also derived from 40 CFR §60.562-2(e) and 25 Pa. Code §129.71.]

(a) All semiannual reports to DEP shall include the following information, summarized from the information in 40 CFR §60.486:

(1) Process unit identification.

(2) For each month during the semiannual reporting period,

(i) Number of valves for which leaks were detected as described in 40 CFR §60.482-7(b),

(ii) Number of valves for which leaks were not repaired as required in 40 CFR §60.482-7(d)(1),

(iii) Number of pumps for which leaks were detected as described in 40 CFR §60.482-2(b), (d)(4)(ii)(A) or (B), or (d)(5)(iii),

(iv) Number of pumps for which leaks were not repaired as required in 40 CFR §60.482-2(c)(1) and (d)(6),

(v) Number of compressors for which leaks were detected as described in 40 CFR §60.482-3(f),

(vi) Number of compressors for which leaks were not repaired as required in 40 CFR §60.482-3(g)(1), and

(vii) The facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically

infeasible.

(3) Dates of process unit shutdowns which occurred within the semiannual reporting period.

(4) Revisions to items reported according to paragraph (b) if changes have occurred since the initial report or subsequent revisions to the initial report.

(b) The permittee shall report the results of all performance tests in accordance with 40 CFR §60.8. The provisions of 40 CFR §60.8(d) do not apply to affected facilities subject to the provisions of this subpart except that the permittee must notify DEP of the schedule for the performance tests at least 30 days before the performance tests.

(c) The requirements of 40 CFR §60.487(a) through (c) remain in force until and unless EPA, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such State. In that event, affected sources within the State will be relieved of the obligation to comply with the requirements of 40 CFR §60.487(a) through
(c), provided that they comply with the requirements established by the State.

VI. WORK PRACTICE REQUIREMENTS.

 # 009 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-1]

Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry

Standards: General.

[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]

(a) The permittee shall demonstrate compliance with the requirements of 40 CFR §§60.482-1 through 60.482-10 or §60.480(e) for all equipment.

(b) Compliance with 40 CFR §§60.482-1 to 60.482-10 will be determined by review of records and reports, review of performance test results, and inspection using the methods and procedures specified in 40 CFR §60.485.

(c) As per 40 CFR §60.482-1(d), equipment that is in vacuum service is excluded from the requirements of 40 CFR §§ 60.482-2 to 60.482-10 if it is identified as required in 40 CFR § 60.486(e)(5).

 # 010 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-10]

Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry

Standards: Closed vent systems and control devices.

[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]

(a) Closed vent systems and control devices must comply with the respective provisions specified in 40 CFR § 60.482-10.

(b) As per 40 CFR §60.482-10(f), except as provided in 40 CFR §60.482-1(i) through (k), each closed vent system shall be inspected according to the procedures and schedule specified in paragraphs (1) and (2) below.

(1) If the vapor collection system or closed vent system is constructed of hard-piping, the permittee shall comply with the requirements specified in paragraphs (i) and (ii) below:

(i) Conduct an initial inspection according to the procedures in 40 CFR §60.485(b); and

(ii) Conduct annual visual inspections for visible, audible, or olfactory indications of leaks.

(2) If the vapor collection system or closed vent system is constructed of ductwork, the permittee shall:

(i) Conduct an initial inspection according to the procedures in 40 CFR §60.485(b); and

SECTION D. Source Level Requirements

ii) Conduct annual inspections according to the procedures in 40 CFR §60.485(b).

(c) As per 40 CFR §60.482-10(g), leaks, as indicated by an instrument reading greater than 500 parts per million by volume above background or by visual inspections, shall be repaired as soon as practicable except as provided in 40 CFR §60.482-10(h).

(1) A first attempt at repair shall be made no later than 5 calendar days after the leak is detected.

(2) Repair shall be completed no later than 15 calendar days after the leak is detected.

(d) As per 40 CFR §60.482-10(h), delay of repair of a closed vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown or if the permittee determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be complete by the end of the next process unit shutdown.

(e) As per 40 CFR §60.482-10(i), if a vapor collection system or closed vent system is operated under a vacuum, it is exempt from the inspection requirements of 40 CFR §60.482-10(f)(1)(i) and (f)(2) .

(f) As per 40 CFR §60.482-10(j), any parts of the closed vent system that are designated, as described in paragraph (l)(1) of 40 CFR §60.482-10, as unsafe to inspect are exempt from the inspection requirements of 40 CFR §60.482-10(f)(1)(i) and (f)(2) if they comply with the requirements specified in 40 CFR §60.482-10(j)(1) and (2) :

(1) The permittee determines that the equipment is unsafe to inspect because inspecting personnel would be exposed to an imminent or potential danger as a consequence of complying with 40 CFR §60.482-10(f)(1)(i) or (f)(2); and

(2) The permittee has a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times.

(g) As per 40 CFR §60.482-10(k), any parts of the closed vent system that are designated, as described in 40 CFR §60.482-10(l)(2), as difficult to inspect are exempt from the inspection requirements of 40 CFR §60.482-10(f)(1)(i) and (f)(2) if they comply with the requirements specified in 40 CFR §60.482-10(k)(1) through (3):

(1) The permittee determines that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters above a support surface; and

(2) The process unit within which the closed vent system is located becomes an affected facility through 40 CFR §§60.14 or 60.15, or the permittee designates less than 3.0 percent of the total number of closed vent system equipment as difficult to inspect; and

(3) The permittee has a written plan that requires inspection of the equipment at least once every 5 years. A closed vent system is exempt from inspection if it is operated under a vacuum.

(h) As per 40 CFR §60.482-10(l), the permittee shall record the information specified in 40 CFR §60.482-10(l)(1) through (5).

(1) Identification of all parts of the closed vent system that are designated as unsafe to inspect, an explanation of why the equipment is unsafe to inspect, and the plan for inspecting the equipment.

(2) Identification of all parts of the closed vent system that are designated as difficult to inspect, an explanation of why the equipment is difficult to inspect, and the plan for inspecting the equipment.

(3) For each inspection during which a leak is detected, a record of the information specified in 40 CFR §60.486(c).

(4) For each inspection conducted in accordance with 40 CFR §60.485(b) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.

(5) For each visual inspection conducted in accordance with 40 CFR §60.482-10(f)(1)(ii) during which no leaks are

SECTION D. Source Level Requirements

detected,a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.

(i) As per 40 CFR §60.482-10(m), closed vent systems and the flares shall be operated at all times when emissions may be vented to them.

 # 011 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-3]

Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry

Compressors.

[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]

(a) Each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of VOC to the atmosphere, except as provided in 40 CFR §60.482-1(c) and 40 CFR §60.482-3(h), (i), and (j).

(b) Each compressor seal system as required in paragraph (a) above shall be:

(1) Operated with the barrier fluid at a pressure that is greater than the compressor stuffing box pressure; or

(2) Equipped with a barrier fluid system degassing reservoir that is routed to a process or fuel gas system or connected by a closed vent system to a control device that complies with the requirements of 40 CFR §60.482-10; or

(3) Equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions to the atmosphere.

(c) The barrier fluid system shall be in heavy liquid service or shall not be in VOC service.

(d) Each barrier fluid system as described in 40 CFR §60.482-3(a) shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both.

(e)(1) Each sensor as required in paragraph (d) above shall be checked daily or shall be equipped with an audible alarm.

(2) The permittee shall determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.

(f) If the sensor indicates failure of the seal system, the barrier system, or both based on the criterion determined under 40 CFR §60.482-3(e)(2), a leak is detected.

(g)(1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR §60.482-9.

(2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(h) A compressor is exempt from the requirements of 40 CFR §60.482-3(a) and (b), if it is equipped with a closed vent system to capture and transport leakage from the compressor drive shaft back to a process or fuel gas system or to a control device that complies with the requirements of 40 CFR §60.482-10, except as provided in 40 CFR §60.482-3(i).

(i) Any compressor that is designated, as described in 40 CFR §60.486(e)(1) and (2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of 40 CFR §60.482-3(a)-(h) if the compressor:

(1) Is demonstrated to be operating with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the methods specified in 40 CFR §60.485(c); and

(2) Is tested for compliance with 40 CFR §60.482-3(i)(1) initially upon designation, annually, and at other times requested by DEP.

SECTION D. Source Level Requirements

(j) Any existing reciprocating compressor in a process unit which becomes an affected facility under provisions of 40 CFR §60.14 or §60.15 is exempt from 40 CFR §60.482-3(a) through (e) and (h), provided the permittee demonstrates that recasting the distance piece or replacing the compressor are the only options available to bring the compressor into compliance with the provisions of 40 CFR §60.482-3(a) through (e) and (h).

 # 012 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-4]

Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry

Standards: Pressure relief devices in gas/vapor service.

[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]

(a) Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as determined by the methods specified in 40 CFR §60.485(c).

(b)(1) After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after the pressure release, except as provided in 40 CFR §60.482-9.

(2) No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the conditions of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, by the methods specified in 40 CFR §60.485(c).

(c) Any pressure relief device that is routed to a process or fuel gas system or equipped with a closed vent system capable of capturing and transporting leakage through the pressure relief device to a control device as described in 40 CFR §60.482-10 is exempted from the requirements of 40 CFR §60.482-4(a) and (b).

(d)(1) Any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the requirements of 40 CFR §60.482-4(a) and (b) , provided the permittee complies with the requirements in 40 CFR §60.482-4(d)(2).

(2) After each pressure release, a new rupture disk shall be installed upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR §60.482-9.

 # 013 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-5]

Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry

Standards: Sampling connection systems.

[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]

(a) Each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system,except as provided in 40 CFR §60.482-1(c) and 40 CFR §60.482-5(c).

(b) Each closed-purge, closed-loop, or closed-vent system as required in 40 CFR §60.482-5(a) shall comply with the requirements specified in paragraphs (1) through (4) below.

(1) Gases displaced during filling of the sample container are not required to be collected or captured.

(2) Containers that are part of a closed-purge system must be covered or closed when not being filled or emptied.

(3) Gases remaining in the tubing or piping between the closed-purge system valve(s) and sample container valve(s) after the valves are closed and the sample container is disconnected are not required to be collected or captured.

(4) Each closed-purge, closed-loop, or closed-vent system shall be designed and operated to meet requirements in either paragraph (i), (ii), (iii), or (iv) below.

SECTION D. Source Level Requirements

(i) Return the purged process fluid directly to the process line.

(ii) Collect and recycle the purged process fluid to a process.

(iii) Capture and transport all the purged process fluid to a control device that complies with the requirements of 40 CFR §60.482-10.

(iv) Collect, store, and transport the purged process fluid to any of the following systems or facilities:

(A) A waste management unit as defined in 40 CFR §63.111, if the waste management unit is subject to and operated in compliance with the provisions of 40 CFR 63, subpart G, applicable to Group 1 wastewater streams;

(B) A treatment, storage, or disposal facility subject to regulation under 40 CFR parts 262, 264, 265, or 266;

(C) A facility permitted, licensed, or registered by a state to manage municipal or industrial solid waste, if the process fluids are not hazardous waste as defined in 40 CFR 261;

(D) A waste management unit subject to and operated in compliance with the treatment requirements of 40 CFR §61.348(a), provided all waste management units that collect, store, or transport the purged process fluid to the treatment unit are subject to and operated in compliance with the management requirements of 40 CFR §§61.343 through 61.347; or

(E) A device used to burn off-specification used oil for energy recovery in accordance with 40 CFR 279, subpart G, provided the purged process fluid is not hazardous waste as defined in 40 CFR 261.

(c) In situ sampling systems and sampling systems without purges are exempt from the requirements of paragraphs (a) and (b) of 40 CFR §60.482-5.

 # 014 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-6]

Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry

Standards: Open-ended valves or lines.

[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]

(a)(1) Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in 40 CFR §60.482-1(c) and 40 CFR §60.482-6(d) and (e).

(2) The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line.

(b) Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed.

(c) When a double block-and-bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with 40 CFR §60.482-6(a) at all other times.

(d) Open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset are exempt from the requirements of 40 CFR §60.482-6(a), (b) and (c).

(e) Open-ended valves or lines containing materials which would autocatalytically polymerize or would present an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system as specified in 40 CFR §60.482-6(a) through (c) are exempt from the requirements of 40 CFR §60.482-6(a) through (c).

 # 015 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-8]

Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry

Standards: Pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and

SECTION D. Source Level Requirements

connectors.

[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]

(a) If evidence of a potential leak is found by visual, audible, olfactory, or any other detection method at pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors, the permittee shall follow either one of the following procedures:

(1) The permittee shall monitor the equipment within 5 days by the method specified in 40 CFR §60.485(b) and shall comply with the requirements of 40 CFR §60.482-8(b) through (d).

(2) The permittee shall eliminate the visual, audible, olfactory, or other indication of a potential leak within 5 calendar days of detection.

(b) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(c)(1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR §60.482-9.

(2) The first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(d) First attempts at repair include, but are not limited to, the best practices described under 40 CFR §§60.482-2(c)(2) and 60.482-7(e).

VII. ADDITIONAL REQUIREMENTS.

 # 016 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-9]

Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry

Standards: Delay of repair.

[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]

(a) Delay of repair of equipment for which leaks have been detected will be allowed if repair within 15 days is technically infeasible without a process unit shutdown. Repair of this equipment shall occur before the end of the next process unit shutdown. Monitoring to verify repair must occur within 15 days after startup of the process unit.

(b) Delay of repair of equipment will be allowed for equipment which is isolated from the process and which does not remain in VOC service.

(c) Delay of repair for valves will be allowed if:

(1) The permittee demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair, and

(2) When repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with 40 CFR §60.482-10.

(d) Delay of repair for pumps will be allowed if:

(1) Repair requires the use of a dual mechanical seal system that includes a barrier fluid system, and

(2) Repair is completed as soon as practicable, but not later than 6 months after the leak was detected.

(e) Delay of repair beyond a process unit shutdown will be allowed for a valve, if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the next process unit shutdown will not be

SECTION D. Source Level Requirements

allowed unless the next process unit shutdown occurs sooner than 6 months after the first process unit shutdown.

(f) When delay of repair is allowed for a leaking pump or valve that remains in service, the pump or valve may be considered to be repaired and no longer subject to delay of repair requirements if two consecutive monthly monitoring instrument readings are below the leak definition.

 # 017 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.562-2]

Subpart DDD - Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry

Standards: Equipment leaks of VOC.

[Additional authority for this permit condition is also derived from 40 CFR §60.562-2 and 25 Pa. Code §§127.512(h) and 129.71.]

(a) As per 40 CFR §60.562-2(a), the permittee shall comply with the requirements specified in 40 CFR §§60.482-1 through 60.482-10.

(b) As per 40 CFR §60.562-2(d), the permittee shall comply with the provisions specified in 40 CFR §60.485.

(c) As per 40 CFR §60.562-2(e), The permittee shall comply with 40 CFR §§60.486 and 60.487.

***** Permit Shield in Effect. *****

SECTION D. Source Level Requirements

Source ID: 105 Source Name: MAINTENANCE PARTS WASHER

Source Capacity/Throughput:

PROC 105 → STAC Z03

I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §129.63]

Degreasing operations

(a) The permittee shall only use a 5% solution of Armakleen 4 in 1 cleaner, or equivalent cleaning solution, having 5% or lower VOC content.

(b) If the permittee uses a cleaning solution containing greater than 5% VOC content, all the applicable requirements of 25 Pa. Code Section 129.63 shall be followed.

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

IV. RECORDKEEPING REQUIREMENTS.

 # 002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall maintain a record of the cleaner used in the Parts Washer to include the name of the supplier, the VOC content and the vapor pressure at 68F, available on a Safety Data Sheet or similar documentation.

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

VII. ADDITIONAL REQUIREMENTS.

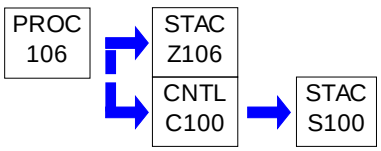
No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

***** Permit Shield in Effect. *****

SECTION D. Source Level Requirements

Source ID: 106 Source Name: PROPYLENE SPLITTER PROCESS & CAVERN 4

Source Capacity/Throughput: N/A



I. RESTRICTIONS.

Control Device Efficiency Restriction(s).

 # 001 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.562-1]

Subpart DDD - Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry

Standards: Process emissions.

[Additional authority of this permit is also derived from 25 Pa. Code §129.114.]

(a) As per 40 CFR §60.562-1(a) and (d), vent stream emissions from this source shall be directed to Sunoco Flare (Source ID C100) that shall be operated in compliance with the requirements specified in 40 CFR §60.18 at all times, as per 40 CFR
§§60.562-1(a)(1)(i)(C) and 60.482-10(d).

(b) As per 40 CFR §60.562-1(e), vent systems that contain valves that could divert a vent stream from the flare shall have car-sealed opened all valves in the vent system from the emission source to the flare and car-sealed closed all valves in vent system that would lead the vent stream to the atmosphere, either directly or indirectly, bypassing the flare.

(c) Using of off-site flare does not exempt the permittee from complying with all the applicable requirements in 40 CFR §60.18, and Part 60 Subparts VV and DDD.

(d) Data, records, and reports pertaining to the Sunoco Flare (Source ID C100) may be maintained by a third party, but shall be made available by the permittee to the Department within 10 business days upon DEP's request.

II. TESTING REQUIREMENTS.

 # 002 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.485]

Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry

Test methods and procedures.

[Additional authority for this permit condition is derived from 40 CFR §60.562-2(d) and 25 Pa. Code §129.71.]

(a) In conducting the performance tests required in 40 CFR §60.8, the permittee shall use as reference methods and procedures the test methods in appendix A of 40 CFR part 60 or other methods and procedures as specified in 40 CFR §60.485, except as provided in 40 CFR §60.8(b).

(b) The permittee shall determine compliance with the standards in 40 CFR §§60.482-1 through 60.482-10, and 60.484 as follows:

(1) Method 21 shall be used to determine the presence of leaking sources. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21. The following calibration gases shall be used:

(i) Zero air (less than 10 ppm of hydrocarbon in air); and

(ii) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane.

SECTION D. Source Level Requirements

(c) The permittee shall determine compliance with the no detectable emission standards in 40 CFR §§60.482-2(e), 60.482-3(i), 60.482-4, 60.482-7(f), and 60.482-10(e) as follows:

(1) The requirements of paragraph (b) shall apply.

(2) Method 21 shall be used to determine the background level. All potential leak interfaces shall be traversed as close to the interface as possible. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.

(d) The permittee shall test each piece of equipment unless the permittee demonstrates that a process unit is not in VOC service, i.e., that the VOC content would never be reasonably expected to exceed 10 percent by weight. For purposes of this demonstration, the following methods and procedures shall be used:

(1) Procedures that conform to the general methods in ASTM E260-73, 91, or 96, E168-67, 77, or 92, E169-63, 77, or 93 (incorporated by reference—see 40 CFR §60.17) shall be used to determine the percent VOC content in the process fluid that is contained in or contacts a piece of equipment.

(2) Organic compounds that are considered by the Administrator to have negligible photochemical reactivity may be excluded from the total quantity of organic compounds in determining the VOC content of the process fluid.

(3) Engineering judgment may be used to estimate the VOC content, if a piece of equipment had not been shown previously to be in service. If the Administrator disagrees with the judgment, 40 CFR §60.485(d)(1) and (2) shall be used to resolve the disagreement.

(e) The permittee shall demonstrate that a piece of equipment is in light liquid service by showing that all the following conditions apply:

(1) The vapor pressure of one or more of the organic components is greater than 0.3 kPa at 20 °C (1.2 in. H2O at 68 °F). Standard reference texts or ASTM D2879-83, 96, or 97 (incorporated by reference—see 40 CFR §60.17) shall be used to determine the vapor pressures.

(2) The total concentration of the pure organic components having a vapor pressure greater than 0.3 kPa at 20 °C (1.2 in. H2O at 68 °F) is equal to or greater than 20 percent by weight.

(3) The fluid is a liquid at operating conditions.

(f) Samples used in conjunction with 40 CFR §60.485(d), (e), and (g) shall be representative of the process fluid that is contained in or contacts the equipment.

III. MONITORING REQUIREMENTS.

 # 003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code §§127.511.]

(a) The permittee shall monitor the polypropylene production on a monthly and on a 12-month rolling basis.

(b) Monitoring of components shall be conducted in accordance with 40 CFR Part 60 Subpart VV.

(c) The permittee shall calculate the VOC emissions on a monthly and on a 12-month rolling basis. Fugitive VOC emissions shall be calculated using procedures and criteria approved by the Department.

 # 004 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-2]

Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry

SECTION D. Source Level Requirements

Standards: Pumps in light liquid service.

[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]

(a)(1) Each pump in light liquid service shall be monitored monthly to detect leaks by the methods specified in 40 CFR §60.485(b), except as provided in 40 CFR §60.482-1(c) and (f) and 40 CFR §60.482-2(d), (e) and (f). A pump that begins operation in light liquid service after the initial startup date for the process unit must be monitored for the first time within 30 days after the end of its startup period, except for a pump that replaces a leaking pump and except as provided in 40 CFR §60.482-1(c) and (f), and 40 CFR §60.482-2(d), (e) and (f).

(2) Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal, except as provided in 40 CFR §60.482-1(f).

(b)(1) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(2) If there are indications of liquids dripping from the pump seal, the permittee shall follow the procedure specified in 40 CFR §60.482-2(b)(2)(i) or (ii) . This requirement does not apply to a pump that was monitored after a previous weekly inspection if the instrument reading for that monitoring event was less than 10,000 ppm and the pump was not repaired since that monitoring event.

(i) Monitor the pump within 5 days as specified in 40 CFR §60.485(b). If an instrument reading of 10,000 ppm or greater is measured, a leak is detected. The leak shall be repaired using the procedures in 40 CFR §60.482-2(c).

(ii) Designate the visual indications of liquids dripping as a leak, and repair the leak within 15 days of detection by eliminating the visual indications of liquids dripping.

(c)(1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR §60.482-9.

(2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. First attempts at repair include, but are not limited to, the practices described in 40 CFR §60.482-2(c)(2)(i) and (ii), where practicable.

(i) Tightening the packing gland nuts;

(ii) Ensuring that the seal flush is operating at design pressure and temperature.

(d) Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of paragraph (a) of this section, provided the requirements specified in 40 CFR §60.482-2(d)(1) through (6) are met.

(1) Each dual mechanical seal system is—

(i) Operated with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressure; or

(ii) Equipped with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed vent system to a control device that complies with the requirements of 40 CFR §60.482-10; or

(iii) Equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions to the atmosphere.

(2) The barrier fluid system is in heavy liquid service or is not in VOC service.

(3) Each barrier fluid system is equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both.

(4)(i) Each pump is checked by visual inspection, each calendar week, for indications of liquids dripping from the pump seals.

SECTION D. Source Level Requirements

(ii) If there are indications of liquids dripping from the pump seal at the time of the weekly inspection, the permittee shall follow the procedure specified in 40 CFR §60.482-2(d)(4)(ii)(A) or (B).

(A) Monitor the pump within 5 days as specified in 40 CFR §60.485(b) to determine if there is a leak of VOC in the barrier fluid. If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(B) Designate the visual indications of liquids dripping as a leak.

(5)(i) Each sensor as described in 40 CFR §60.482-2(d)(3) is checked daily or is equipped with an audible alarm.

(ii) The permittee determines, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.

(iii) If the sensor indicates failure of the seal system, the barrier fluid system, or both, based on the criterion established in 40 CFR §60.482-2(d)(5)(ii), a leak is detected.

(6)(i) When a leak is detected pursuant to 40 CFR §60.482-2(d)(4)(ii)(A), it shall be repaired as specified in 40 CFR §60.482-2(c).

(ii) A leak detected pursuant to 40 CFR §60.482-2(d)(5)(iii) shall be repaired within 15 days of detection by eliminating the conditions that activated the sensor.

(iii) A designated leak pursuant to 40 CFR §60.482-2(d)(4)(ii)(B) shall be repaired within 15 days of detection by eliminating visual indications of liquids dripping.

(e) Any pump that is designated, as described in 40 CFR §60.486(e)(1) and (2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of 40 CFR §60.482-2(a), (c), and (d) if the pump:

(1) Has no externally actuated shaft penetrating the pump housing,

(2) Is demonstrated to be operating with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background as measured by the methods specified in 40 CFR §60.485(c), and

(3) Is tested for compliance with 40 CFR §60.482-2(e)(2) initially upon designation, annually, and at other times requested by the Administrator.

(f) If any pump is equipped with a closed vent system capable of capturing and transporting any leakage from the seal or seals to a process or to a fuel gas system or to a control device that complies with the requirements of 40 CFR §60.482-10, it is exempt from 40 CFR §60.482-2(a) through (e).

(g) Any pump that is designated, as described in 40 CFR §60.486(f)(1), as an unsafe-to-monitor pump is exempt from the monitoring and inspection requirements of 40 CFR §60.482-2(a) and (d)(4) through (6) if:

(1) The permittee demonstrates that the pump is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR §60.482-2(a); and

(2) The permittee has a written plan that requires monitoring of the pump as frequently as practicable during safe-to-monitor times but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in 40 CFR §60.482-2(c) if a leak is detected.

(h) Any pump that is located within the boundary of an unmanned plant site is exempt from the weekly visual inspection requirement of 40 CFR §60.482-2(a)(2) and (d)(4), and the daily requirements of 40 CFR §60.482-2(d)(5) , provided that each pump is visually inspected as often as practicable and at least monthly.

SECTION D. Source Level Requirements

 # 005 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-7]

Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry

Standards: Valves in gas/vapor service and in light liquid service.

[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]

(a)(1) Each valve shall be monitored monthly to detect leaks by the methods specified in 40 CFR §60.485(b) and shall comply with 40 CFR §60.482-7(b) through (e), except as provided in 40 CFR §§60.482-7(f), (g), and (h), and 40 CFR §60.482-1(c) and (f).

(2) A valve that begins operation in gas/vapor service or light liquid service after the initial startup date for the process unit must be monitored according to 40 CFR §60.482-7(a)(2)(i), except for a valve that replaces a leaking valve and except as provided in 40 CFR §§60.482-7(f), (g), and (h), and 60.482-1(c).

(i) Monitor the valve as in 40 CFR §60.482-7(a)(1). The valve must be monitored for the first time within 30 days after the end of its startup period to ensure proper installation.

(b) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(c)(1)(i) Any valve for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected.

(ii) As an alternative to monitoring all of the valves in the first month of a quarter, the permittee may elect to subdivide the process unit into 2 or 3 subgroups of valves and monitor each subgroup in a different month during the quarter, provided each subgroup is monitored every 3 months. The permittee must keep records of the valves assigned to each subgroup.

(2) If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months.

(d)(1) When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in 40 CFR §60.482-9.

(2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(e) First attempts at repair include, but are not limited to, the following best practices where practicable:

(1) Tightening of bonnet bolts;

(2) Replacement of bonnet bolts;

(3) Tightening of packing gland nuts;

(4) Injection of lubricant into lubricated packing.

(f) Any valve that is designated, as described in 40 CFR §60.486(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of 40 CFR §60.482-7(a) if the valve:

(1) Has no external actuating mechanism in contact with the process fluid,

(2) Is operated with emissions less than 500 ppm above background as determined by the method specified in 40 CFR §60.485(c), and

(3) Is tested for compliance with 40 CFR §60.482-7(f)(2) initially upon designation, annually, and at other times requested by the Administrator.

SECTION D. Source Level Requirements

(g) Any valve that is designated, as described in 40 CFR §60.486(f)(1), as an unsafe-to-monitor valve is exempt from the requirements of 40 CFR §60.482-7(a) if:

(1) The permittee demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR §60.482-7(a), and

(2) The permittee adheres to a written plan that requires monitoring of the valve as frequently as practicable during safe-tomonitor times.

(h) Any valve that is designated, as described in 40 CFR §60.486(f)(2), as a difficult-to-monitor valve is exempt from the requirements of 40 CFR §60.482-7(a) if:

(1) The permittee demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface.

(2) The process unit within which the valve is located either becomes an affected facility through 40 CFR §60.14 or §60.15 or the permittee designates less than 3.0 percent of the total number of valves as difficult-to-monitor, and

(3) The permittee follows a written plan that requires monitoring of the valve at least once per calendar year.

IV. RECORDKEEPING REQUIREMENTS.

 # 006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code §§ 127.511]
The permittee shall keep the following records.

(a) the polypropylene production on a monthly and on a 12-month rolling basis.

(b) LDAR component monitoring

(c) the VOC emissions on a monthly and on a 12-month rolling basis.

 # 007 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.486]

Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry

Recordkeeping requirements.

[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(e) and 25 Pa. Code §129.71.]

(a)(1) The permittee shall comply with the recordkeeping requirements of 40 CFR §60.486.

(2) The permittee may comply with the recordkeeping requirements for the sources in one recordkeeping system if the system identifies each record by each source.

(b) When each leak is detected as specified in 40 CFR §§60.482-2, 60.482-3, 60.482-7, and 60.482-8, the following requirements apply:

(1) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.

(2) The identification on a valve may be removed after it has been monitored for 2 successive months as specified in 40 CFR §60.482-7(c) and no leak has been detected during those 2 months.

(3) The identification on equipment except on a valve, may be removed after it has been repaired.

(c) When each leak is detected as specified in 40 CFR §§60.482-2, 60.482-3, 60.482-7, and 60.482-8, the following

SECTION D. Source Level Requirements

information shall be recorded in a log and shall be kept for 2 years in a readily accessible location:

(1) The instrument and operator identification numbers and the equipment identification number.

(2) The date the leak was detected and the dates of each attempt to repair the leak.

(3) Repair methods applied in each attempt to repair the leak.

(4) “Above 10,000” if the maximum instrument reading measured by the methods specified in 40 CFR §60.485(a) after each repair attempt is equal to or greater than 10,000 ppm.

(5) “Repair delayed” and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.

(6) The signature of the permittee (or designate) whose decision it was that repair could not be effected without a process shutdown.

(7) The expected date of successful repair of the leak if a leak is not repaired within 15 days.

(8) Dates of process unit shutdowns that occur while the equipment is unrepaired.

(9) The date of successful repair of the leak.

(d) The following information pertaining to the design requirements for closed vent systems and control devices described in 40 CFR §60.482-10 shall be recorded and kept in a readily accessible location:

(1) Detailed schematics, design specifications, and piping and instrumentation diagrams.

(2) The dates and descriptions of any changes in the design specifications.

(3) A description of the parameter or parameters monitored, as required in 40 CFR §60.482-10(e), to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring.

(4) Periods when the closed vent systems and control devices required in 40 CFR §§60.482-2, 60.482-3, 60.482-4, and 60.482-5 are not operated as designed, including periods when a flare pilot light does not have a flame.

(5) Dates of startups and shutdowns of the closed vent systems and control devices required in 40 CFR §§60.482-2, 60.482-3, 60.482-4, and 60.482-5.

(e) The following information pertaining to all equipment subject to the requirements in 40 CFR §§60.482-1 to 60.482-10 shall be recorded in a log that is kept in a readily accessible location:

(1) A list of identification numbers for equipment subject to the requirements of 40 CFR 60 Subpart VV.

(2)(i) A list of identification numbers for equipment that are designated for no detectable emissions under the provisions of 40 CFR §§60.482-2(e), 60.482-3(i) and 60.482-7(f).

(ii) The designation of equipment as subject to the requirements of 40 CFR §§60.482-2(e), 60.482-3(i), or 60.482-7(f) shall be signed by the permittee.

(3) A list of equipment identification numbers for pressure relief devices required to comply with 40 CFR §60.482-4.

(4)(i) The dates of each compliance test as required in 40 CFR §§60.482-2(e), 60.482-3(i), 60.482-4, and 60.482-7(f).

(ii) The background level measured during each compliance test.

SECTION D. Source Level Requirements

(iii) The maximum instrument reading measured at the equipment during each compliance test.

(5) A list of identification numbers for equipment in vacuum service.

(6) A list of identification numbers for equipment that the permittee designates as operating in VOC service less than 300 hr/yr in accordance with 40 CFR §60.482-1(e), a description of the conditions under which the equipment is in VOC service, and rationale supporting the designation that it is in VOC service less than 300 hr/yr.

(f) The following information pertaining to all valves subject to the requirements of 40 CFR §60.482-7(g) and (h) and to all pumps subject to the requirements of 40 CFR §60.482-2(g) shall be recorded in a log that is kept in a readily accessible location:

(1) A list of identification numbers for valves and pumps that are designated as unsafe-to-monitor, an explanation for each valve or pump stating why the valve or pump is unsafe-to-monitor, and the plan for monitoring each valve or pump.

(2) A list of identification numbers for valves that are designated as difficult-to-monitor, an explanation for each valve stating why the valve is difficult-to-monitor, and the schedule for monitoring each valve.

(g) As per 40 CFR §60.486(h), the following information shall be recorded in a log that is kept in a readily accessible location:

(1) Design criterion required in 40 CFR §§60.482-2(d)(5) and explanation of the design criterion; and

(2) Any changes to this criterion and the reasons for the changes.

(h) As per 40 CFR §60.486(i), the following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in 40 CFR §60.480(d):

(1) An analysis demonstrating the design capacity of the affected facility,

(2) A statement listing the feed or raw materials and products from the affected facilities and an analysis demonstrating whether these chemicals are heavy liquids or beverage alcohol, and

(3) An analysis demonstrating that equipment is not in VOC service.

(i) As per 40 CFR §60.486(j), information and data used to demonstrate that a piece of equipment is not in VOC service shall be recorded in a log that is kept in a readily accessible location.

(j) As per 40 CFR §60.486(k), the provisions of 40 CFR §60.7(b) and (d) do not apply to affected facilities subject to 40 CFR 60 Subpart VV.

 # 008 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.565]

Subpart DDD - Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry

Reporting and recordkeeping requirements.

[Additional authority of this permit is also derived from 25 Pa. Code §129.115.]

(a) As per 40 CFR §60.565(b)(2), the permittee shall keep the following records for vent system containing valves that could divert the emission stream away from the flare:

(1) All periods when flow is indicated if flow indicators are installed under 40 CFR §60.563(d)(1).

(2) All times when maintenance is performed on car-sealed valves, when the car seal is broken, and when the valve position is changed (i.e., from open to closed for valves in the vent piping to the control device and from closed to open for valves that vent the stream directly or indirectly to the atmosphere bypassing the control device).

SECTION D. Source Level Requirements

(b) As per 40 CFR §565(e), the permittee shall keep readily accessible continuous records of:

(1) The flare or pilot light flame heat sensing monitoring specified under 40 CFR §60.563(b)(2), and

(2) All periods of operation in which the flare or pilot flame is absent.

(c) As per 40 CFR §60.565(g), the permittee shall keep up-to-date, readily accessible records of:

(1) Any changes in production capacity, or of any replacement, removal or addition of product recovery equipment; and

(2) The results of any performance test performed pursuant to the procedures specified by 40 CFR §60.564.

(d) Data, records, and reports pertaining to the Sunoco Flare (Source ID C100) may be maintained by a third party, but the permittee shall make them available to the Department within 10 business days upon the request of the Department.

V. REPORTING REQUIREMENTS.

 # 009 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.487]

Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry

Reporting requirements.

[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(e) and 25 Pa. Code §129.71.]

(a) All semiannual reports to DEP shall include the following information, summarized from the information in 40 CFR §60.486:

(1) Process unit identification.

(2) For each month during the semiannual reporting period,

(i) Number of valves for which leaks were detected as described in 40 CFR §60.482-7(b),

(ii) Number of valves for which leaks were not repaired as required in 40 CFR §60.482-7(d)(1),

(iii) Number of pumps for which leaks were detected as described in 40 CFR §60.482-2(b), (d)(4)(ii)(A) or (B), or (d)(5)(iii),

(iv) Number of pumps for which leaks were not repaired as required in 40 CFR §60.482-2(c)(1) and (d)(6),

(v) Number of compressors for which leaks were detected as described in 40 CFR §60.482-3(f),

(vi) Number of compressors for which leaks were not repaired as required in 40 CFR §60.482-3(g)(1), and

(vii) The facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible.

(3) Dates of process unit shutdowns which occurred within the semiannual reporting period.

(4) Revisions to items reported according to paragraph (b) if changes have occurred since the initial report or subsequent revisions to the initial report.

(b) The permittee shall report the results of all performance tests in accordance with 40 CFR §60.8. The provisions of 40 CFR §60.8(d) do not apply to affected facilities subject to the provisions of this subpart except that the permittee must notify DEP of the schedule for the performance tests at least 30 days before the performance tests.

(c) The requirements of 40 CFR §60.487(a) through (c) remain in force until and unless EPA, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance

SECTION D. Source Level Requirements

surveillance adopted by such State. In that event, affected sources within the State will be relieved of the obligation to comply with the requirements of 40 CFR §60.487(a) through (c), provided that they comply with the requirements established by the State.

 # 010 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.565]

Subpart DDD - Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry

Reporting and recordkeeping requirements.

The permittee shall submit to DEP semiannual reports of all periods recorded under 40 CFR §60.565(b) when the vent stream has been diverted from the flare.

VI. WORK PRACTICE REQUIREMENTS.

 # 011 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-1]

Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry

Standards: General.

[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]

(a) The permittee shall demonstrate compliance with the requirements of 40 CFR §§60.482-1 through 60.482-10 or §60.480(e) for all equipment.

(b) Compliance with 40 CFR §§60.482-1 to 60.482-10 will be determined by review of records and reports, review of performance test results, and inspection using the methods and procedures specified in 40 CFR §60.485.

(c) As per 40 CFR §60.482-1(d), equipment that is in vacuum service is excluded from the requirements of 40 CFR §§ 60.482-2 to 60.482-10 if it is identified as required in 40 CFR § 60.486(e)(5).

 # 012 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-10]

Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry

Standards: Closed vent systems and control devices.

[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]

(a) Closed vent systems and control devices must comply with the respective provisions specified in 40 CFR § 60.482-10.

(b) As per 40 CFR §60.482-10(f), except as provided in 40 CFR §60.482-1(i) through (k), each closed vent system shall be inspected according to the procedures and schedule specified in paragraphs (1) and (2) below.

(1) If the vapor collection system or closed vent system is constructed of hard-piping, the permittee shall comply with the requirements specified in paragraphs (i) and (ii) below:

(i) Conduct an initial inspection according to the procedures in 40 CFR §60.485(b); and

(ii) Conduct annual visual inspections for visible, audible, or olfactory indications of leaks.

(2) If the vapor collection system or closed vent system is constructed of ductwork, the permittee shall:

(i) Conduct an initial inspection according to the procedures in 40 CFR §60.485(b); and

(ii) Conduct annual inspections according to the procedures in 40 CFR §60.485(b).

(c) As per 40 CFR §60.482-10(g), leaks, as indicated by an instrument reading greater than 500 parts per million by volume above background or by visual inspections, shall be repaired as soon as practicable except as provided in 40 CFR §60.482-10(h).

SECTION D. Source Level Requirements

(1) A first attempt at repair shall be made no later than 5 calendar days after the leak is detected.

(2) Repair shall be completed no later than 15 calendar days after the leak is detected.

(d) As per 40 CFR §60.482-10(h), delay of repair of a closed vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown or if the permittee determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be complete by the end of the next process unit shutdown.

(e) As per 40 CFR §60.482-10(i), if a vapor collection system or closed vent system is operated under a vacuum, it is exempt from the inspection requirements of 40 CFR §60.482-10(f)(1)(i) and (f)(2) .

(f) As per 40 CFR §60.482-10(j), any parts of the closed vent system that are designated, as described in paragraph (l)(1) of 40 CFR §60.482-10, as unsafe to inspect are exempt from the inspection requirements of 40 CFR §60.482-10(f)(1)(i) and (f)(2) if they comply with the requirements specified in 40 CFR §60.482-10(j)(1) and (2) :

(1) The permittee determines that the equipment is unsafe to inspect because inspecting personnel would be exposed to an imminent or potential danger as a consequence of complying with 40 CFR §60.482-10(f)(1)(i) or (f)(2); and

(2) The permittee has a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times.

(g) As per 40 CFR §60.482-10(k), any parts of the closed vent system that are designated, as described in 40 CFR §60.482-10(l)(2), as difficult to inspect are exempt from the inspection requirements of 40 CFR §60.482-10(f)(1)(i) and (f)(2) if they comply with the requirements specified in 40 CFR §60.482-10(k)(1) through (3):

(1) The permittee determines that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters above a support surface; and

(2) The process unit within which the closed vent system is located becomes an affected facility through 40 CFR §§60.14 or 60.15, or the permittee designates less than 3.0 percent of the total number of closed vent system equipment as difficult to inspect; and

(3) The permittee has a written plan that requires inspection of the equipment at least once every 5 years. A closed vent system is exempt from inspection if it is operated under a vacuum.

(h) As per 40 CFR §60.482-10(l), the permittee shall record the information specified in 40 CFR §60.482-10(l)(1) through (5).

(1) Identification of all parts of the closed vent system that are designated as unsafe to inspect, an explanation of why the equipment is unsafe to inspect, and the plan for inspecting the equipment.

(2) Identification of all parts of the closed vent system that are designated as difficult to inspect, an explanation of why the equipment is difficult to inspect, and the plan for inspecting the equipment.

(3) For each inspection during which a leak is detected, a record of the information specified in 40 CFR §60.486(c).

(4) For each inspection conducted in accordance with 40 CFR §60.485(b) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.

(5) For each visual inspection conducted in accordance with 40 CFR §60.482-10(f)(1)(ii) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.

(i) As per 40 CFR §60.482-10(m), closed vent systems and the flares shall be operated at all times when emissions may be vented to them.

SECTION D. Source Level Requirements

 # 013 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-3]

Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry

Compressors.

[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]

(a) Each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of VOC to the atmosphere, except as provided in 40 CFR §60.482-1(c) and 40 CFR §60.482-3(h), (i), and (j).

(b) Each compressor seal system as required in paragraph (a) above shall be:

(1) Operated with the barrier fluid at a pressure that is greater than the compressor stuffing box pressure; or

(2) Equipped with a barrier fluid system degassing reservoir that is routed to a process or fuel gas system or connected by a closed vent system to a control device that complies with the requirements of 40 CFR §60.482-10; or

(3) Equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions to the atmosphere.

(c) The barrier fluid system shall be in heavy liquid service or shall not be in VOC service.

(d) Each barrier fluid system as described in 40 CFR §60.482-3(a) shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both.

(e)(1) Each sensor as required in paragraph (d) above shall be checked daily or shall be equipped with an audible alarm.

(2) The permittee shall determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.

(f) If the sensor indicates failure of the seal system, the barrier system, or both based on the criterion determined under 40 CFR §60.482-3(e)(2), a leak is detected.

(g)(1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR §60.482-9.

(2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(h) A compressor is exempt from the requirements of 40 CFR §60.482-3(a) and (b), if it is equipped with a closed vent system to capture and transport leakage from the compressor drive shaft back to a process or fuel gas system or to a control device that complies with the requirements of 40 CFR §60.482-10, except as provided in 40 CFR §60.482-3(i).

(i) Any compressor that is designated, as described in 40 CFR §60.486(e)(1) and (2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of 40 CFR §60.482-3(a)-(h) if the compressor:

(1) Is demonstrated to be operating with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the methods specified in 40 CFR §60.485(c); and

(2) Is tested for compliance with 40 CFR §60.482-3(i)(1) initially upon designation, annually, and at other times requested by DEP.

(j) Any existing reciprocating compressor in a process unit which becomes an affected facility under provisions of 40 CFR §60.14 or §60.15 is exempt from 40 CFR §60.482-3(a) through (e) and (h), provided the permittee demonstrates that recasting the distance piece or replacing the compressor are the only options available to bring the compressor into compliance with the provisions of 40 CFR §60.482-3(a) through (e) and (h).

SECTION D. Source Level Requirements

 # 014 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-4]

Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry

Standards: Pressure relief devices in gas/vapor service.

[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]

(a) Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as determined by the methods specified in 40 CFR §60.485(c).

(b)(1) After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after the pressure release, except as provided in 40 CFR §60.482-9.

(2) No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the conditions of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, by the methods specified in 40 CFR §60.485(c).

(c) Any pressure relief device that is routed to a process or fuel gas system or equipped with a closed vent system capable of capturing and transporting leakage through the pressure relief device to a control device as described in 40 CFR §60.482-10 is exempted from the requirements of 40 CFR §60.482-4(a) and (b).

(d)(1) Any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the requirements of 40 CFR §60.482-4(a) and (b) , provided the permittee complies with the requirements in 40 CFR §60.482-4(d)(2).

(2) After each pressure release, a new rupture disk shall be installed upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR §60.482-9.

 # 015 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-5]

Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry

Standards: Sampling connection systems.

[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]

(a) Each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system, except as provided in 40 CFR §60.482-1(c) and 40 CFR §60.482-5(c).

(b) Each closed-purge, closed-loop, or closed-vent system as required in 40 CFR §60.482-5(a) shall comply with the requirements specified in paragraphs (1) through (4) below.

(1) Gases displaced during filling of the sample container are not required to be collected or captured.

(2) Containers that are part of a closed-purge system must be covered or closed when not being filled or emptied.

(3) Gases remaining in the tubing or piping between the closed-purge system valve(s) and sample container valve(s) after the valves are closed and the sample container is disconnected are not required to be collected or captured.

(4) Each closed-purge, closed-loop, or closed-vent system shall be designed and operated to meet requirements in either paragraph (i), (ii), (iii), or (iv) below.

(i) Return the purged process fluid directly to the process line.

(ii) Collect and recycle the purged process fluid to a process.

SECTION D. Source Level Requirements

(iii) Capture and transport all the purged process fluid to a control device that complies with the requirements of 40 CFR §60.482-10.

(iv) Collect, store, and transport the purged process fluid to any of the following systems or facilities:

(A) A waste management unit as defined in 40 CFR §63.111, if the waste management unit is subject to and operated in compliance with the provisions of 40 CFR 63, subpart G, applicable to Group 1 wastewater streams;

(B) A treatment, storage, or disposal facility subject to regulation under 40 CFR parts 262, 264, 265, or 266;

(C) A facility permitted, licensed, or registered by a state to manage municipal or industrial solid waste, if the process fluids are not hazardous waste as defined in 40 CFR 261;

(D) A waste management unit subject to and operated in compliance with the treatment requirements of 40 CFR §61.348(a), provided all waste management units that collect, store, or transport the purged process fluid to the treatment unit are subject to and operated in compliance with the management requirements of 40 CFR §§61.343 through 61.347; or

(E) A device used to burn off-specification used oil for energy recovery in accordance with 40 CFR 279, subpart G, provided the purged process fluid is not hazardous waste as defined in 40 CFR 261.

(c) In situ sampling systems and sampling systems without purges are exempt from the requirements of paragraphs (a) and (b) of 40 CFR §60.482-5.

 # 016 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-6]

Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry

Standards: Open-ended valves or lines.

[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]

(a)(1) Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in 40 CFR §60.482-1(c) and 40 CFR §60.482-6(d) and (e).

(2) The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line.

(b) Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed.

(c) When a double block-and-bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with 40 CFR §60.482-6(a) at all other times.

(d) Open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset are exempt from the requirements of 40 CFR §60.482-6(a), (b) and (c).

(e) Open-ended valves or lines containing materials which would autocatalytically polymerize or would present an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system as specified in 40 CFR §60.482-6(a) through (c) are exempt from the requirements of 40 CFR §60.482-6(a) through (c).

 # 017 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-8]

Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry

Standards: Pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors.

[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]

(a) If evidence of a potential leak is found by visual, audible, olfactory, or any other detection method at pumps and valves in

SECTION D. Source Level Requirements

heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors, the permittee shall follow either one of the following procedures:

(1) The permittee shall monitor the equipment within 5 days by the method specified in 40 CFR §60.485(b) and shall comply with the requirements of 40 CFR §60.482-8(b) through (d).

(2) The permittee shall eliminate the visual, audible, olfactory, or other indication of a potential leak within 5 calendar days of detection.

(b) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(c)(1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR §60.482-9.

(2) The first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(d) First attempts at repair include, but are not limited to, the best practices described under 40 CFR §§60.482-2(c)(2) and 60.482-7(e).

VII. ADDITIONAL REQUIREMENTS.

 # 018 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The source consists the following equipment and associated vent emissions:

Two (2) splitters and associated pre-treatment and post-treatment equipment
Cavern #4
Three (3) propylene dryers (V-54A, V54-B, and V-54C)

 # 019 [25 Pa. Code §127.441]

Operating permit terms and conditions.

All fugitive emissions from this source are subject to 25 Pa. Code §129.71 and is exempt from the requirements of 25 Pa. Code §§129.111- 129.115. However, for the process emission from this source that vents to C100 (Sunoco Flare) are subject to the Requirements of 25 Pa. Code §§129.111- 129.115.

 # 020 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-9]

Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry

Standards: Delay of repair.

[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]

(a) Delay of repair of equipment for which leaks have been detected will be allowed if repair within 15 days is technically infeasible without a process unit shutdown. Repair of this equipment shall occur before the end of the next process unit shutdown. Monitoring to verify repair must occur within 15 days after startup of the process unit.

(b) Delay of repair of equipment will be allowed for equipment which is isolated from the process and which does not remain in VOC service.

(c) Delay of repair for valves will be allowed if:

(1) The permittee demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair, and

(2) When repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with 40 CFR §60.482-10.

SECTION D. Source Level Requirements

(d) Delay of repair for pumps will be allowed if:

(1) Repair requires the use of a dual mechanical seal system that includes a barrier fluid system, and

(2) Repair is completed as soon as practicable, but not later than 6 months after the leak was detected.

(e) Delay of repair beyond a process unit shutdown will be allowed for a valve, if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the next process unit shutdown will not be allowed unless the next process unit shutdown occurs sooner than 6 months after the first process unit shutdown.

(f) When delay of repair is allowed for a leaking pump or valve that remains in service, the pump or valve may be considered to be repaired and no longer subject to delay of repair requirements if two consecutive monthly monitoring instrument readings are below the leak definition.

 # 021 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.562-2]

Subpart DDD - Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry

Standards: Equipment leaks of VOC.

[Additional authority for this permit condition is also derived from 40 CFR §60.562-2 and 25 Pa. Code §§127.512(h) and 129.71.]

(a) As per 40 CFR §60.562-2(a), the permittee shall comply with the requirements specified in 40 CFR §§60.482-1 through 60.482-10.

(b) As per 40 CFR §60.562-2(d), the permittee shall comply with the provisions specified in 40 CFR §60.485.

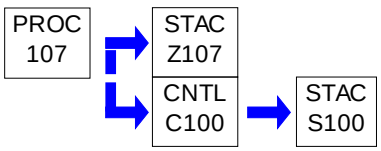
(c) As per 40 CFR §60.562-2(e), The permittee shall comply with 40 CFR §§60.486 and 60.487.

***** Permit Shield in Effect. *****

SECTION D. Source Level Requirements

Source ID: 107 Source Name: PROPYLENE UNLOADING RACK

Source Capacity/Throughput: N/A



I. RESTRICTIONS.

Control Device Efficiency Restriction(s).

 # 001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

When the loading of rail cars with propylene occurs at this source, the air emissions shall be routed to a flare that meets the requirements of 40 CFR §60.18.

 # 002 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.562-1]

Subpart DDD - Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry

Standards: Process emissions.

[Additional authority of this permit is also derived from 25 Pa. Code §129.114]

(a) As per 40 CFR §60.562-1(a) and (d), vent stream emissions from this source shall be directed to Sunoco Flare (Source ID C100) that shall be operated in compliance with the requirements specified in 40 CFR §60.18 at all times, as per 40 CFR
§§60.562-1(a)(1)(i)(C) and 60.482-10(d).

(b) As per 40 CFR §60.562-1(e), vent systems that contain valves that could divert a vent stream from the flare shall have carsealed opened all valves in the vent system from the emission source to the flare and car-sealed closed all valves in vent
system that would lead the vent stream to the atmosphere, either directly or indirectly, bypassing the flare.

(c) Using of off-site flare does not exempt the permittee from complying with all the applicable requirements in 40 CFR §60.18, and Part 60 Subparts VV and DDD.

(d) Data, records, and reports pertaining to the Sunoco Flare (Source ID C100) may be maintained by a third party, but shall be made available by the permittee to the Department within 10 business days upon DEP's request.

II. TESTING REQUIREMENTS.

 # 003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.485]

Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry

Test methods and procedures.

[Additional authority for this permit condition is derived from 40 CFR §60.562-2(d) and 25 Pa. Code §129.71.]

(a) In conducting the performance tests required in 40 CFR §60.8, the permittee shall use as reference methods and procedures the test methods in appendix A of 40 CFR part 60 or other methods and procedures as specified in 40 CFR §60.485, except as provided in 40 CFR §60.8(b).

(b) The permittee shall determine compliance with the standards in 40 CFR §§60.482-1 through 60.482-10, and 60.484 as follows:

(1) Method 21 shall be used to determine the presence of leaking sources. The instrument shall be calibrated before use

each day of its use by the procedures specified in Method 21. The following calibration gases shall be used:

(i) Zero air (less than 10 ppm of hydrocarbon in air); and

(ii) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane.

(c) The permittee shall determine compliance with the no detectable emission standards in 40 CFR §§60.482-2(e), 60.482-3(i), 60.482-4, 60.482-7(f), and 60.482-10(e) as follows:

(1) The requirements of paragraph (b) shall apply.

(2) Method 21 shall be used to determine the background level. All potential leak interfaces shall be traversed as close to the interface as possible. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.

(d) The permittee shall test each piece of equipment unless the permittee demonstrates that a process unit is not in VOC service, i.e., that the VOC content would never be reasonably expected to exceed 10 percent by weight. For purposes of this demonstration, the following methods and procedures shall be used:

(1) Procedures that conform to the general methods in ASTM E260-73, 91, or 96, E168-67, 77, or 92, E169-63, 77, or 93 (incorporated by reference—see 40 CFR §60.17) shall be used to determine the percent VOC content in the process fluid that is contained in or contacts a piece of equipment.

(2) Organic compounds that are considered by the Administrator to have negligible photochemical reactivity may be excluded from the total quantity of organic compounds in determining the VOC content of the process fluid.

(3) Engineering judgment may be used to estimate the VOC content, if a piece of equipment had not been shown previously to be in service. If the Administrator disagrees with the judgment, 40 CFR §60.485(d)(1) and (2) shall be used to resolve the disagreement.

(e) The permittee shall demonstrate that a piece of equipment is in light liquid service by showing that all the following conditions apply:

(1) The vapor pressure of one or more of the organic components is greater than 0.3 kPa at 20 °C (1.2 in. H2O at 68 °F). Standard reference texts or ASTM D2879-83, 96, or 97 (incorporated by reference—see 40 CFR §60.17) shall be used to determine the vapor pressures.

(2) The total concentration of the pure organic components having a vapor pressure greater than 0.3 kPa at 20 °C (1.2 in. H2O at 68 °F) is equal to or greater than 20 percent by weight.

(3) The fluid is a liquid at operating conditions.

(f) Samples used in conjunction with 40 CFR §60.485(d), (e), and (g) shall be representative of the process fluid that is contained in or contacts the equipment.

III. MONITORING REQUIREMENTS.

 # 004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall monitor and record the amount of material loaded and unloaded each month.

 # 005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The permittee shall monitor each component in accordance 40 CFR Part 60 Subpart VV.

(b) Fugitive VOC emissions shall be calculated using procedures and criteria approved by the Department.

SECTION D. Source Level Requirements

(c) VOC emissions from this source shall be calculated using mass balance and engineering estimates approved by the Department.

(d) The permittee shall calculate the VOC emissions on a monthly basis and as a 12-month rolling sum.

 # 006 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-2]

Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry

Standards: Pumps in light liquid service.

[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]

(a)(1) Each pump in light liquid service shall be monitored monthly to detect leaks by the methods specified in 40 CFR §60.485(b), except as provided in 40 CFR §60.482-1(c) and (f) and 40 CFR §60.482-2(d), (e) and (f). A pump that begins operation in light liquid service after the initial startup date for the process unit must be monitored for the first time within 30 days after the end of its startup period, except for a pump that replaces a leaking pump and except as provided in 40 CFR §60.482-1(c) and (f), and 40 CFR §60.482-2(d), (e) and (f).

(2) Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal, except as provided in 40 CFR §60.482-1(f).

(b)(1) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(2) If there are indications of liquids dripping from the pump seal, the permittee shall follow the procedure specified in 40 CFR §60.482-2(b)(2)(i) or (ii) . This requirement does not apply to a pump that was monitored after a previous weekly inspection if the instrument reading for that monitoring event was less than 10,000 ppm and the pump was not repaired since that monitoring event.

(i) Monitor the pump within 5 days as specified in 40 CFR §60.485(b). If an instrument reading of 10,000 ppm or greater is measured, a leak is detected. The leak shall be repaired using the procedures in 40 CFR §60.482-2(c).

(ii) Designate the visual indications of liquids dripping as a leak, and repair the leak within 15 days of detection by eliminating the visual indications of liquids dripping.

(c)(1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR §60.482-9.

(2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. First attempts at repair include, but are not limited to, the practices described in 40 CFR §60.482-2(c)(2)(i) and (ii), where practicable.

(i) Tightening the packing gland nuts;

(ii) Ensuring that the seal flush is operating at design pressure and temperature.

(d) Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of paragraph (a) of this section, provided the requirements specified in 40 CFR §60.482-2(d)(1) through (6) are met.

(1) Each dual mechanical seal system is—

(i) Operated with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressure; or

(ii) Equipped with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed vent system to a control device that complies with the requirements of 40 CFR §60.482-10; or

(iii) Equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions to the atmosphere.

(2) The barrier fluid system is in heavy liquid service or is not in VOC service.

(3) Each barrier fluid system is equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both.

(4)(i) Each pump is checked by visual inspection, each calendar week, for indications of liquids dripping from the pump seals.

(ii) If there are indications of liquids dripping from the pump seal at the time of the weekly inspection, the permittee shall follow the procedure specified in 40 CFR §60.482-2(d)(4)(ii)(A) or (B).

(A) Monitor the pump within 5 days as specified in 40 CFR §60.485(b) to determine if there is a leak of VOC in the barrier fluid. If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(B) Designate the visual indications of liquids dripping as a leak.

(5)(i) Each sensor as described in 40 CFR §60.482-2(d)(3) is checked daily or is equipped with an audible alarm.

(ii) The permittee determines, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.

(iii) If the sensor indicates failure of the seal system, the barrier fluid system, or both, based on the criterion established in 40 CFR §60.482-2(d)(5)(ii), a leak is detected.

(6)(i) When a leak is detected pursuant to 40 CFR §60.482-2(d)(4)(ii)(A), it shall be repaired as specified in 40 CFR §60.482-2(c).

(ii) A leak detected pursuant to 40 CFR §60.482-2(d)(5)(iii) shall be repaired within 15 days of detection by eliminating the conditions that activated the sensor.

(iii) A designated leak pursuant to 40 CFR §60.482-2(d)(4)(ii)(B) shall be repaired within 15 days of detection by eliminating visual indications of liquids dripping.

(e) Any pump that is designated, as described in 40 CFR §60.486(e)(1) and (2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of 40 CFR §60.482-2(a), (c), and (d) if the pump:

(1) Has no externally actuated shaft penetrating the pump housing,

(2) Is demonstrated to be operating with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background as measured by the methods specified in 40 CFR §60.485(c), and

(3) Is tested for compliance with 40 CFR §60.482-2(e)(2) initially upon designation, annually, and at other times requested by the Administrator.

(f) If any pump is equipped with a closed vent system capable of capturing and transporting any leakage from the seal or seals to a process or to a fuel gas system or to a control device that complies with the requirements of 40 CFR §60.482-10, it is exempt from 40 CFR §60.482-2(a) through (e).

(g) Any pump that is designated, as described in 40 CFR §60.486(f)(1), as an unsafe-to-monitor pump is exempt from the monitoring and inspection requirements of 40 CFR §60.482-2(a) and (d)(4) through (6) if:

(1) The permittee demonstrates that the pump is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR §60.482-2(a); and

(2) The permittee has a written plan that requires monitoring of the pump as frequently as practicable during safe-to-monitor

SECTION D. Source Level Requirements

times but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in 40 CFR §60.482-2(c) if a leak is detected.

(h) Any pump that is located within the boundary of an unmanned plant site is exempt from the weekly visual inspection requirement of 40 CFR §60.482-2(a)(2) and (d)(4), and the daily requirements of 40 CFR §60.482-2(d)(5) , provided that each pump is visually inspected as often as practicable and at least monthly.

 # 007 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-7]

Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry

Standards: Valves in gas/vapor service and in light liquid service.

[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]

(a)(1) Each valve shall be monitored monthly to detect leaks by the methods specified in 40 CFR §60.485(b) and shall comply with 40 CFR §60.482-7(b) through (e), except as provided in 40 CFR §§60.482-7(f), (g), and (h), and 40 CFR §60.482-1(c) and (f).

(2) A valve that begins operation in gas/vapor service or light liquid service after the initial startup date for the process unit must be monitored according to 40 CFR §60.482-7(a)(2)(i), except for a valve that replaces a leaking valve and except as provided in 40 CFR §§60.482-7(f), (g), and (h), and 60.482-1(c).

(i) Monitor the valve as in 40 CFR §60.482-7(a)(1). The valve must be monitored for the first time within 30 days after the end of its startup period to ensure proper installation.

(b) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(c)(1)(i) Any valve for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected.

(ii) As an alternative to monitoring all of the valves in the first month of a quarter, the permittee may elect to subdivide the process unit into 2 or 3 subgroups of valves and monitor each subgroup in a different month during the quarter, provided each subgroup is monitored every 3 months. The permittee must keep records of the valves assigned to each subgroup.

(2) If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months.
(d)(1) When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in 40 CFR §60.482-9.

(2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(e) First attempts at repair include, but are not limited to, the following best practices where practicable:

(1) Tightening of bonnet bolts;

(2) Replacement of bonnet bolts;

(3) Tightening of packing gland nuts;

(4) Injection of lubricant into lubricated packing.

(f) Any valve that is designated, as described in 40 CFR §60.486(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of 40 CFR §60.482-7(a) if the valve:

(1) Has no external actuating mechanism in contact with the process fluid,

(2) Is operated with emissions less than 500 ppm above background as determined by the method specified in 40 CFR

§60.485(c), and

(3) Is tested for compliance with 40 CFR §60.482-7(f)(2) initially upon designation, annually, and at other times requested by the Administrator.

(g) Any valve that is designated, as described in 40 CFR §60.486(f)(1), as an unsafe-to-monitor valve is exempt from the requirements of 40 CFR §60.482-7(a) if:

(1) The permittee demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR §60.482-7(a), and

(2) The permittee adheres to a written plan that requires monitoring of the valve as frequently as practicable during safe-tomonitor times.

(h) Any valve that is designated, as described in 40 CFR §60.486(f)(2), as a difficult-to-monitor valve is exempt from the requirements of 40 CFR §60.482-7(a) if:

(1) The permittee demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface.

(2) The process unit within which the valve is located either becomes an affected facility through 40 CFR §60.14 or §60.15 or the permittee designates less than 3.0 percent of the total number of valves as difficult-to-monitor, and

(3) The permittee follows a written plan that requires monitoring of the valve at least once per calendar year.

IV. RECORDKEEPING REQUIREMENTS.

 # 008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall keep the following records:

a. Number of loadings and unloadings on a monthly basis
b. Amount of loaded and unloaded propane/propylene mixture on a monthly basis
c. The emissions from the loading and unloading operations on a monthly basis and 12-month rolling sum.
d. LDAR component monitoring
e. data used in engineering estimates for calculating VOC emissions.

 # 009 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.486]

Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry

Recordkeeping requirements.

[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(e) and 25 Pa. Code §129.71.]

(a)(1) The permittee shall comply with the recordkeeping requirements of 40 CFR §60.486.

(2) The permittee may comply with the recordkeeping requirements for the sources in one recordkeeping system if the system identifies each record by each source.

(b) When each leak is detected as specified in 40 CFR §§60.482-2, 60.482-3, 60.482-7, and 60.482-8, the following requirements apply:

(1) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.

(2) The identification on a valve may be removed after it has been monitored for 2 successive months as specified in 40 CFR §60.482-7(c) and no leak has been detected during those 2 months.

(3) The identification on equipment except on a valve, may be removed after it has been repaired.

(c) When each leak is detected as specified in 40 CFR §§60.482-2, 60.482-3, 60.482-7, and 60.482-8, the following information shall be recorded in a log and shall be kept for 2 years in a readily accessible location:

(1) The instrument and operator identification numbers and the equipment identification number.

(2) The date the leak was detected and the dates of each attempt to repair the leak.

(3) Repair methods applied in each attempt to repair the leak.

(4) “Above 10,000” if the maximum instrument reading measured by the methods specified in 40 CFR §60.485(a) after each repair attempt is equal to or greater than 10,000 ppm.

(5) “Repair delayed” and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.

(6) The signature of the permittee (or designate) whose decision it was that repair could not be effected without a process shutdown.

(7) The expected date of successful repair of the leak if a leak is not repaired within 15 days.

(8) Dates of process unit shutdowns that occur while the equipment is unrepaired.

(9) The date of successful repair of the leak.

(d) The following information pertaining to the design requirements for closed vent systems and control devices described in 40 CFR §60.482-10 shall be recorded and kept in a readily accessible location:

(1) Detailed schematics, design specifications, and piping and instrumentation diagrams.

(2) The dates and descriptions of any changes in the design specifications.

(3) A description of the parameter or parameters monitored, as required in 40 CFR §60.482-10(e), to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring.

(4) Periods when the closed vent systems and control devices required in 40 CFR §§60.482-2, 60.482-3, 60.482-4, and 60.482-5 are not operated as designed, including periods when a flare pilot light does not have a flame.

(5) Dates of startups and shutdowns of the closed vent systems and control devices required in 40 CFR §§60.482-2, 60.482-3, 60.482-4, and 60.482-5.

(e) The following information pertaining to all equipment subject to the requirements in 40 CFR §§60.482-1 to 60.482-10 shall be recorded in a log that is kept in a readily accessible location:

(1) A list of identification numbers for equipment subject to the requirements of 40 CFR 60 Subpart VV.

(2)(i) A list of identification numbers for equipment that are designated for no detectable emissions under the provisions of 40 CFR §§60.482-2(e), 60.482-3(i) and 60.482-7(f).

(ii) The designation of equipment as subject to the requirements of 40 CFR §§60.482-2(e), 60.482-3(i), or 60.482-7(f) shall be signed by the permittee.

(3) A list of equipment identification numbers for pressure relief devices required to comply with 40 CFR §60.482-4.

(4)(i) The dates of each compliance test as required in 40 CFR §§60.482-2(e), 60.482-3(i), 60.482-4, and 60.482-7(f).

SECTION D. Source Level Requirements

(ii) The background level measured during each compliance test.

(iii) The maximum instrument reading measured at the equipment during each compliance test.

(5) A list of identification numbers for equipment in vacuum service.

(6) A list of identification numbers for equipment that the permittee designates as operating in VOC service less than 300 hr/yr in accordance with 40 CFR §60.482-1(e), a description of the conditions under which the equipment is in VOC service, and rationale supporting the designation that it is in VOC service less than 300 hr/yr.

(f) The following information pertaining to all valves subject to the requirements of 40 CFR §60.482-7(g) and (h) and to all pumps subject to the requirements of 40 CFR §60.482-2(g) shall be recorded in a log that is kept in a readily accessible location:

(1) A list of identification numbers for valves and pumps that are designated as unsafe-to-monitor, an explanation for each valve or pump stating why the valve or pump is unsafe-to-monitor, and the plan for monitoring each valve or pump.

(2) A list of identification numbers for valves that are designated as difficult-to-monitor, an explanation for each valve stating why the valve is difficult-to-monitor, and the schedule for monitoring each valve.

(g) As per 40 CFR §60.486(h), the following information shall be recorded in a log that is kept in a readily accessible location:

(1) Design criterion required in 40 CFR §§60.482-2(d)(5) and explanation of the design criterion; and

(2) Any changes to this criterion and the reasons for the changes.

(h) As per 40 CFR §60.486(i), the following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in 40 CFR §60.480(d):

(1) An analysis demonstrating the design capacity of the affected facility,

(2) A statement listing the feed or raw materials and products from the affected facilities and an analysis demonstrating whether these chemicals are heavy liquids or beverage alcohol, and

(3) An analysis demonstrating that equipment is not in VOC service.

(i) As per 40 CFR §60.486(j), information and data used to demonstrate that a piece of equipment is not in VOC service shall be recorded in a log that is kept in a readily accessible location.

(j) As per 40 CFR §60.486(k), the provisions of 40 CFR §60.7(b) and (d) do not apply to affected facilities subject to 40 CFR 60 Subpart VV.

 # 010 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.565]

Subpart DDD - Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry

Reporting and recordkeeping requirements.

[Additional authority of this permit is also derived from 25 Pa. Code §129.115.]

(a) As per 40 CFR §60.565(b)(2), the permittee shall keep the following records for vent system containing valves that could divert the emission stream away from the flare:

(1) All periods when flow is indicated if flow indicators are installed under 40 CFR §60.563(d)(1).

(2) All times when maintenance is performed on car-sealed valves, when the car seal is broken, and when the valve position is changed (i.e., from open to closed for valves in the vent piping to the control device and from closed to open for

SECTION D. Source Level Requirements

valves that vent the stream directly or indirectly to the atmosphere bypassing the control device).

(b) As per 40 CFR §565(e), the permittee shall keep readily accessible continuous records of:

(1) The flare or pilot light flame heat sensing monitoring specified under 40 CFR §60.563(b)(2), and

(2) All periods of operation in which the flare or pilot flame is absent.

(c) As per 40 CFR §60.565(g), the permittee shall keep up-to-date, readily accessible records of:

(1) Any changes in production capacity, or of any replacement, removal or addition of product recovery equipment; and

(2) The results of any performance test performed pursuant to the procedures specified by 40 CFR §60.564.

(d) Data, records, and reports pertaining to the Sunoco Flare (Source ID C100) may be maintained by a third party, but the permittee shall make them available to the Department within 10 business days upon the request of the Department.

V. REPORTING REQUIREMENTS.

 # 011 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.487]

Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry

Reporting requirements.

[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(e) and 25 Pa. Code §129.71.]

(a) All semiannual reports to DEP shall include the following information, summarized from the information in 40 CFR §60.486:

(1) Process unit identification.

(2) For each month during the semiannual reporting period,

(i) Number of valves for which leaks were detected as described in 40 CFR §60.482-7(b),

(ii) Number of valves for which leaks were not repaired as required in 40 CFR §60.482-7(d)(1),

(iii) Number of pumps for which leaks were detected as described in 40 CFR §60.482-2(b), (d)(4)(ii)(A) or (B), or (d)(5)(iii),

(iv) Number of pumps for which leaks were not repaired as required in 40 CFR §60.482-2(c)(1) and (d)(6),

(v) Number of compressors for which leaks were detected as described in 40 CFR §60.482-3(f),

(vi) Number of compressors for which leaks were not repaired as required in 40 CFR §60.482-3(g)(1), and

(vii) The facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible.

(3) Dates of process unit shutdowns which occurred within the semiannual reporting period.

(4) Revisions to items reported according to paragraph (b) if changes have occurred since the initial report or subsequent revisions to the initial report.

(b) The permittee shall report the results of all performance tests in accordance with 40 CFR §60.8. The provisions of 40 CFR §60.8(d) do not apply to affected facilities subject to the provisions of this subpart except that the permittee must notify DEP of the schedule for the performance tests at least 30 days before the performance tests.

SECTION D. Source Level Requirements

(c) The requirements of 40 CFR §60.487(a) through (c) remain in force until and unless EPA, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such State. In that event, affected sources within the State will be relieved of the obligation to comply with the requirements of 40 CFR §60.487(a) through (c), provided that they comply with the requirements established by the State.

 # 012 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.565]

Subpart DDD - Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry

Reporting and recordkeeping requirements.

The permittee shall submit to DEP semiannual reports of all periods recorded under 40 CFR §60.565(b) when the vent stream has been diverted from the flare.

VI. WORK PRACTICE REQUIREMENTS.

 # 013 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-1]

Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry

Standards: General.

[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]

(a) The permittee shall demonstrate compliance with the requirements of 40 CFR §§60.482-1 through 60.482-10 or §60.480(e) for all equipment.

(b) Compliance with 40 CFR §§60.482-1 to 60.482-10 will be determined by review of records and reports, review of performance test results, and inspection using the methods and procedures specified in 40 CFR §60.485.

(c) As per 40 CFR §60.482-1(d), equipment that is in vacuum service is excluded from the requirements of 40 CFR §§ 60.482-2 to 60.482-10 if it is identified as required in 40 CFR § 60.486(e)(5).

 # 014 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-10]

Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry

Standards: Closed vent systems and control devices.

[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]

(a) Closed vent systems and control devices must comply with the respective provisions specified in 40 CFR § 60.482-10.

(b) As per 40 CFR §60.482-10(f), except as provided in 40 CFR §60.482-1(i) through (k), each closed vent system shall be inspected according to the procedures and schedule specified in paragraphs (1) and (2) below.

(1) If the vapor collection system or closed vent system is constructed of hard-piping, the permittee shall comply with the requirements specified in paragraphs (i) and (ii) below:

(i) Conduct an initial inspection according to the procedures in 40 CFR §60.485(b); and

(ii) Conduct annual visual inspections for visible, audible, or olfactory indications of leaks.

(2) If the vapor collection system or closed vent system is constructed of ductwork, the permittee shall:

(i) Conduct an initial inspection according to the procedures in 40 CFR §60.485(b); and

(ii) Conduct annual inspections according to the procedures in 40 CFR §60.485(b).

(c) As per 40 CFR §60.482-10(g), leaks, as indicated by an instrument reading greater than 500 parts per million by volume above background or by visual inspections, shall be repaired as soon as practicable except as provided in 40 CFR §60.482-

10(h).

(1) A first attempt at repair shall be made no later than 5 calendar days after the leak is detected.

(2) Repair shall be completed no later than 15 calendar days after the leak is detected.

(d) As per 40 CFR §60.482-10(h), delay of repair of a closed vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown or if the permittee determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be complete by the end of the next process unit shutdown.

(e) As per 40 CFR §60.482-10(i), if a vapor collection system or closed vent system is operated under a vacuum, it is exempt from the inspection requirements of 40 CFR §60.482-10(f)(1)(i) and (f)(2) .

(f) As per 40 CFR §60.482-10(j), any parts of the closed vent system that are designated, as described in paragraph (l)(1) of 40 CFR §60.482-10, as unsafe to inspect are exempt from the inspection requirements of 40 CFR §60.482-10(f)(1)(i) and (f)(2) if they comply with the requirements specified in 40 CFR §60.482-10(j)(1) and (2) :

(1) The permittee determines that the equipment is unsafe to inspect because inspecting personnel would be exposed to an imminent or potential danger as a consequence of complying with 40 CFR §60.482-10(f)(1)(i) or (f)(2); and

(2) The permittee has a written plan that requires inspection of the equipment as frequently as practicable during safe-toinspect times.

(g) As per 40 CFR §60.482-10(k), any parts of the closed vent system that are designated, as described in 40 CFR §60.482-10(l)(2), as difficult to inspect are exempt from the inspection requirements of 40 CFR §60.482-10(f)(1)(i) and (f)(2) if they comply with the requirements specified in 40 CFR §60.482-10(k)(1) through (3):

(1) The permittee determines that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters above a support surface; and

(2) The process unit within which the closed vent system is located becomes an affected facility through 40 CFR §§60.14 or 60.15, or the permittee designates less than 3.0 percent of the total number of closed vent system equipment as difficult to inspect; and

(3) The permittee has a written plan that requires inspection of the equipment at least once every 5 years. A closed vent system is exempt from inspection if it is operated under a vacuum.

(h) As per 40 CFR §60.482-10(l), the permittee shall record the information specified in 40 CFR §60.482-10(l)(1) through (5).

(1) Identification of all parts of the closed vent system that are designated as unsafe to inspect, an explanation of why the equipment is unsafe to inspect, and the plan for inspecting the equipment.

(2) Identification of all parts of the closed vent system that are designated as difficult to inspect, an explanation of why the equipment is difficult to inspect, and the plan for inspecting the equipment.

(3) For each inspection during which a leak is detected, a record of the information specified in 40 CFR §60.486(c).

(4) For each inspection conducted in accordance with 40 CFR §60.485(b) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.

(5) For each visual inspection conducted in accordance with 40 CFR §60.482-10(f)(1)(ii) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.

(i) As per 40 CFR §60.482-10(m), closed vent systems and the flares shall be operated at all times when emissions may

SECTION D. Source Level Requirements

be vented to them.

 # 015 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-3]

Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry

Compressors.

[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]

(a) Each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of VOC to the atmosphere, except as provided in 40 CFR §60.482-1(c) and 40 CFR §60.482-3(h), (i), and (j).

(b) Each compressor seal system as required in paragraph (a) above shall be:

(1) Operated with the barrier fluid at a pressure that is greater than the compressor stuffing box pressure; or

(2) Equipped with a barrier fluid system degassing reservoir that is routed to a process or fuel gas system or connected by a closed vent system to a control device that complies with the requirements of 40 CFR §60.482-10; or

(3) Equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions to the atmosphere.

(c) The barrier fluid system shall be in heavy liquid service or shall not be in VOC service.

(d) Each barrier fluid system as described in 40 CFR §60.482-3(a) shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both.

(e)(1) Each sensor as required in paragraph (d) above shall be checked daily or shall be equipped with an audible alarm.

(2) The permittee shall determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.

(f) If the sensor indicates failure of the seal system, the barrier system, or both based on the criterion determined under 40 CFR §60.482-3(e)(2), a leak is detected.

(g)(1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR §60.482-9.

(2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(h) A compressor is exempt from the requirements of 40 CFR §60.482-3(a) and (b), if it is equipped with a closed vent system to capture and transport leakage from the compressor drive shaft back to a process or fuel gas system or to a control device that complies with the requirements of 40 CFR §60.482-10, except as provided in 40 CFR §60.482-3(i).

(i) Any compressor that is designated, as described in 40 CFR §60.486(e)(1) and (2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of 40 CFR §60.482-3(a)-(h) if the compressor:

(1) Is demonstrated to be operating with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the methods specified in 40 CFR §60.485(c); and

(2) Is tested for compliance with 40 CFR §60.482-3(i)(1) initially upon designation, annually, and at other times requested by DEP.

(j) Any existing reciprocating compressor in a process unit which becomes an affected facility under provisions of 40 CFR §60.14 or §60.15 is exempt from 40 CFR §60.482-3(a) through (e) and (h), provided the permittee demonstrates that

SECTION D. Source Level Requirements

recasting the distance piece or replacing the compressor are the only options available to bring the compressor into compliance with the provisions of 40 CFR §60.482-3(a) through (e) and (h).

 # 016 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-4]

Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry

Standards: Pressure relief devices in gas/vapor service.

[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]

(a) Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as determined by the methods specified in 40 CFR §60.485(c).

(b)(1) After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after the pressure release, except as provided in 40 CFR §60.482-9.

(2) No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the conditions of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, by the methods specified in 40 CFR §60.485(c).

(c) Any pressure relief device that is routed to a process or fuel gas system or equipped with a closed vent system capable of capturing and transporting leakage through the pressure relief device to a control device as described in 40 CFR §60.482-10 is exempted from the requirements of 40 CFR §60.482-4(a) and (b).

(d)(1) Any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the requirements of 40 CFR §60.482-4(a) and (b) , provided the permittee complies with the requirements in 40 CFR §60.482-4(d)(2).

(2) After each pressure release, a new rupture disk shall be installed upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR §60.482-9.

 # 017 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-5]

Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry

Standards: Sampling connection systems.

[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]

(a) Each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system, except as provided in 40 CFR §60.482-1(c) and 40 CFR §60.482-5(c).

(b) Each closed-purge, closed-loop, or closed-vent system as required in 40 CFR §60.482-5(a) shall comply with the requirements specified in paragraphs (1) through (4) below.

(1) Gases displaced during filling of the sample container are not required to be collected or captured.

(2) Containers that are part of a closed-purge system must be covered or closed when not being filled or emptied.

(3) Gases remaining in the tubing or piping between the closed-purge system valve(s) and sample container valve(s) after the valves are closed and the sample container is disconnected are not required to be collected or captured.

(4) Each closed-purge, closed-loop, or closed-vent system shall be designed and operated to meet requirements in either paragraph (i), (ii), (iii), or (iv) below.

(i) Return the purged process fluid directly to the process line.

SECTION D. Source Level Requirements

(ii) Collect and recycle the purged process fluid to a process.

(iii) Capture and transport all the purged process fluid to a control device that complies with the requirements of 40 CFR §60.482-10.

(iv) Collect, store, and transport the purged process fluid to any of the following systems or facilities:

(A) A waste management unit as defined in 40 CFR §63.111, if the waste management unit is subject to and operated in compliance with the provisions of 40 CFR 63, subpart G, applicable to Group 1 wastewater streams;

(B) A treatment, storage, or disposal facility subject to regulation under 40 CFR parts 262, 264, 265, or 266;

(C) A facility permitted, licensed, or registered by a state to manage municipal or industrial solid waste, if the process fluids are not hazardous waste as defined in 40 CFR 261;

(D) A waste management unit subject to and operated in compliance with the treatment requirements of 40 CFR §61.348(a), provided all waste management units that collect, store, or transport the purged process fluid to the treatment unit are subject to and operated in compliance with the management requirements of 40 CFR §§61.343 through 61.347; or

(E) A device used to burn off-specification used oil for energy recovery in accordance with 40 CFR 279, subpart G, provided the purged process fluid is not hazardous waste as defined in 40 CFR 261.

(c) In situ sampling systems and sampling systems without purges are exempt from the requirements of paragraphs (a) and (b) of 40 CFR §60.482-5.

 # 018 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-6]

Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry

Standards: Open-ended valves or lines.

[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]

(a)(1) Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in 40 CFR §60.482-1(c) and 40 CFR §60.482-6(d) and (e).

(2) The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line.

(b) Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed.

(c) When a double block-and-bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with 40 CFR §60.482-6(a) at all other times.

(d) Open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset are exempt from the requirements of 40 CFR §60.482-6(a), (b) and (c).

(e) Open-ended valves or lines containing materials which would autocatalytically polymerize or would present an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system as specified in 40 CFR §60.482-6(a) through (c) are exempt from the requirements of 40 CFR §60.482-6(a) through (c).

 # 019 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-8]

Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry

Standards: Pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors.

[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]

SECTION D. Source Level Requirements

(a) If evidence of a potential leak is found by visual, audible, olfactory, or any other detection method at pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors, the permittee shall follow either one of the following procedures:

(1) The permittee shall monitor the equipment within 5 days by the method specified in 40 CFR §60.485(b) and shall comply with the requirements of 40 CFR §60.482-8(b) through (d).

(2) The permittee shall eliminate the visual, audible, olfactory, or other indication of a potential leak within 5 calendar days of detection.

(b) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(c)(1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR §60.482-9.

(2) The first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(d) First attempts at repair include, but are not limited to, the best practices described under 40 CFR §§60.482-2(c)(2) and 60.482-7(e).

VII. ADDITIONAL REQUIREMENTS.

 # 020 [25 Pa. Code §127.441]

Operating permit terms and conditions.

This source consists of compressors, pumps, loading racks, product storage, knockout pots, transfer lines, and associated equipment for purchased polymer grade propylene and purchased refinery grade propylene.

 # 021 [25 Pa. Code §127.441]

Operating permit terms and conditions.

All fugitive emissions from this source are subject to 25 Pa. Code §129.71 and is exempt from the requirements of 25 Pa. Code §§129.111- 129.115. However, for the process emission from this source that vents to C100 (Sunoco Flare) are subject to the Requirements of 25 Pa. Code §§129.111- 129.115

 # 022 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-9]

Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry

Standards: Delay of repair.

[Additional authority for this permit condition is also derived from 40 CFR §60.562-2(a) and 25 Pa. Code §129.71.]

(a) Delay of repair of equipment for which leaks have been detected will be allowed if repair within 15 days is technically infeasible without a process unit shutdown. Repair of this equipment shall occur before the end of the next process unit shutdown. Monitoring to verify repair must occur within 15 days after startup of the process unit.

(b) Delay of repair of equipment will be allowed for equipment which is isolated from the process and which does not remain in VOC service.

(c) Delay of repair for valves will be allowed if:

(1) The permittee demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair, and

(2) When repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with 40 CFR §60.482-10.

(d) Delay of repair for pumps will be allowed if:

SECTION D. Source Level Requirements

(1) Repair requires the use of a dual mechanical seal system that includes a barrier fluid system, and

(2) Repair is completed as soon as practicable, but not later than 6 months after the leak was detected.

(e) Delay of repair beyond a process unit shutdown will be allowed for a valve, if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the next process unit shutdown will not be allowed unless the next process unit shutdown occurs sooner than 6 months after the first process unit shutdown.

(f) When delay of repair is allowed for a leaking pump or valve that remains in service, the pump or valve may be considered to be repaired and no longer subject to delay of repair requirements if two consecutive monthly monitoring instrument readings are below the leak definition.

 # 023 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.562-2]

Subpart DDD - Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry

Standards: Equipment leaks of VOC.

[Additional authority for this permit condition is also derived from 40 CFR §60.562-2 and 25 Pa. Code §§127.512(h) and 129.71.]

(a) As per 40 CFR §60.562-2(a), the permittee shall comply with the requirements specified in 40 CFR §§60.482-1 through 60.482-10.

(b) As per 40 CFR §60.562-2(d), the permittee shall comply with the provisions specified in 40 CFR §60.485.

(c) As per 40 CFR §60.562-2(e), The permittee shall comply with 40 CFR §§60.486 and 60.487.

***** Permit Shield in Effect. *****

SECTION D. Source Level Requirements

Source ID: 108 Source Name: FIRE WATER PUMP ENGINES

Source Capacity/Throughput:

I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §123.21]

General

No person may permit the emission into the outdoor atmosphere of sulfur oxides from a source in a manner that the concentration of the sulfur oxides, expressed as SO2, in the effluent gas exceeds 500 parts per million, by volume, dry basis.

Operation Hours Restriction(s).

 # 002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this condition is also derived from 25 Pa. Code §§ 127.512 and 129.112 (c)(10).]

The permittee shall not operate any of these emergency engines more than 500 hours in any 12 consecutive month period.

 # 003 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6640]

Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

How do I demonstrate continuous compliance with the emission limitations, operating limitations, and other requireme

The permittee must operate the emergency stationary RICE according to the requirements specified in the latest version of 40 CFR §63.6640(f) in effect.

If the permittee does not operate the engine according to the requirements of the latest version of 40 CFR Section 63.6640(f), the engine will not be considered an emergency engine under 40 CFR Part 63 Subpart ZZZZ and must meet all requirements for non-emergency engines.

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

III. MONITORING REQUIREMENTS.

 # 004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall monitor and record the operating hours each time the engines are operated.

 # 005 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6625]

Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

What are my monitoring, installation, operation, and maintenance requirements?

The emergency engine shall be equipped with a non-resettable hour meter.

SECTION D. Source Level Requirements

IV. RECORDKEEPING REQUIREMENTS.

 # 006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall keep the following records each time the engines are operated:

(a) The date
(b) The reason(s) the engine was operated
(c) Hours operated

 # 007 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6655]

Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

What records must I keep?

[Additional authority of this permit condition is also derived from 25 Pa. Code §129.115.]

The permittee must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that the stationary RICE was operated and maintained according to owner's maintenance plan.

 # 008 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6660]

Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

In what form and how long must I keep my records?

(a) Your records must be in a form suitable and readily available for expeditious review according to §63.10(b)(1).

(b) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

 # 009 [25 Pa. Code §129.112]

Presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule

The permitee shall install, maintain and operate the source in accordance with the manufacturer's specifications and with good operating practices.

[Compliance with this condition ensures compliance with applicable requirements of 25 Pa. Code §129.112(c)]

 # 010 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6603]

Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

What emission limitations, operating limitations, and other requirements must I meet if I own or operate an existing stationary RICE located at an area source of HAP emissions?

The permittee must comply with the following requirements as specified in Item 4 of Table 2d to 40 CFR 63 Subpart ZZZZ:

(a) Change oil and filter every 500 hours of operation or annually, whichever comes first;
(b) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and
(c) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

[Compliance with this condition ensures compliance with applicable requirements of 25 Pa. Code §129.112(c)]

SECTION D. Source Level Requirements

 # 011 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6605]

Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

What are my general requirements for complying with this subpart?

(a) The permittee must be in compliance with the requirements in this subpart that apply to you at all times.

(b) At all times the permittee must operate and maintain the engines in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to DEP which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

 # 012 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6625]

Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

What are my monitoring, installation, operation, and maintenance requirements?

(a) The permittee must operate and maintain the stationary RICE according to the manufacturer's emission-related written instructions or develop own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

(b) The permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.

 # 013 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6640]

Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

How do I demonstrate continuous compliance with the emission limitations, operating limitations, and other requirements?

The permittee must demonstrate continuous compliance with the requirements in Item 4 of Table 2d to 40 CFR 63 Subpart ZZZZ according to the following methods as specified in item 9 of Table 6 to 40 CFR 63 Subpart ZZZZ.

(a) Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or

(b) Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

***** Permit Shield in Effect. *****

SECTION D. Source Level Requirements

Source ID: C02 Source Name: FLARE SYSTEM (STEAM-ASSISTED)

Source Capacity/Throughput: N/A

I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

III. MONITORING REQUIREMENTS.

 # 001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512(h).]

The permittee shall

(a) monitor continuously the heat content of the flare gas using a gas chromatography (GC) analyzer or Department approved device

(b) monitor continuously the velocity of the gas using the gas flow meter or Department approved device

(c) calculate, on a three (3) hour rolling average, the net heating value of the gas and the exit velocity using the equations and methods established in 40 CFR § 60.18 (f)(3-6).

IV. RECORDKEEPING REQUIREMENTS.

 # 002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(1) The permittee shall maintain daily records of :

(a) the readings of the heat content
(b) the readings of the exit velocity
(c) the calculations of the net heating value and the exit velocity, on a three (3) hour rolling average

(2) At least 90% of each quarter's data shall be available at all times.

V. REPORTING REQUIREMENTS.

 # 003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived fom 25 Pa. Code § 127.512(h).]

(a) The permitee shall notify the Department within two hours during normal working hours of any malfunction of the flare which is expected to last longer than two hours.

(b) The permittee shall submit a written report regarding the malfunction to the Department within seven working days.

VI. WORK PRACTICE REQUIREMENTS.

 # 004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The flare shall be operated with no emissions of malodorous air contaminants detectable beyond the plant's property in conformance with 25 Pa. Code Section 123.31

SECTION D. Source Level Requirements

 # 005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority of this permit condition is also derived from 25 Pa. Code §§129.97(c)(6) and 129.112(c)(8)]

The permittee shall

(a) operate and maintain all devices according to manufacturer's specifications and/or good operating practices.

(b) calibrate the GC analyzer and the gas flow meter, according to manufacturer's specifications and/or good operating practices, monthly.

[Compliance with this condition ensures compliance with applicable requirements of 25 Pa. Code §129.112]

VII. ADDITIONAL REQUIREMENTS.

 # 006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512(h).]

The flare system is for the control of Volatile Organic Compound (VOC) emissions from Plant 1 and Plant 2 manufacturing sources, except the typical atmospheric venting - PSV lifts, etc.

***** Permit Shield in Effect. *****

SECTION E. Source Group Restrictions.

Group Name: GROUP 1

Group Description: Plant 1 Emission

Sources included in this group

ID	Name
101A	PLANT 1, THREE STORAGE SILOS
102A	PLANT 1 POLYPROPYLENE MFG SOURCES
103A	PLANT 1 FUGITIVE SOURCES

I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code §§ 127.512(h)]

(a) The total Volatile Organic Compounds (VOC) emissions from the Polypropylene Plant No. 1 shall be less than 37.10 tons per year on a 12-month rolling sum.

(b) Particulate Matter (PM/PM10) emissions from the Plant No.1 shall be less than 7.10 tons per 12-month rolling sum.

(c) The polypropylene Plant Number 1 consists of:

Source 101A - Three Storage Silos
Source 102A - Polypropylene Mfg. Sources
Source 103A - Fugitive Sources

 # 002 [25 Pa. Code §129.114]

Alternative RACT proposal and petition for alternative compliance schedule

[Additional authority of this permit condition is also derived from 25 Pa. Code §127.511.]

The total volatile organic compounds (VOC) emissions from Plant No. 1 sources (fugitive sources, silo sources and manufacturing sources) shall be limited to 10 lb/hr and 240 lb/day, each calculated as a 12-month rolling average.

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

III. MONITORING REQUIREMENTS.

 # 003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code §§127.511 and 129.115.]

(a) The permittee shall monitor the polypropylene production on a monthly and on a 12-month rolling basis

(b) Monitoring of components shall be conducted in accordance with 40 CFR Part 60 Subpart VV.

(c) The permittee shall calculate the VOC emissions on a monthly and on a 12-month rolling basis. Fugitive VOC emissions shall be calculated using procedures and criteria approved by the Department.

(d) For calculating the overall emissions for Plant No. 1, at the conclusion of each month during which polypropylene plant No. 1 sources have operated, the permittee shall calculate VOC emissions using established emission estimation techniques, and determine the hours and days of operation for that month. The permittee shall record the monthly VOC emission calculation and operating record and use this information to calculate the average VOC emissions as lb/hr and lb/day for the rolling 12-month period then ending with that month.

SECTION E. Source Group Restrictions.

IV. RECORDKEEPING REQUIREMENTS.

 # 004 [25 Pa. Code §129.115]

Written notification, compliance demonstration and recordkeeping and reporting requirements

The permittee shall keep records of

(a) Polypropylene production monthly and as a 12-month rolling sum;

(b) (i) VOC emissions monthly and as a 12-month rolling sum.
(ii) VOC emissions in lb/hr and in lb/day as a 12-month rolling average, as calculated for condition #003 (d) of this section.

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

***** Permit Shield in Effect. *****

SECTION F. Alternative Operation Requirements.

No Alternative Operations exist for this Title V facility.

SECTION G. Emission Restriction Summary.

Source Id	Source Description

101A PLANT 1, THREE STORAGE SILOS

Emission Limit			Pollutant
7.100	Tons/Yr	12-months rolling basis, Plant No. 1 combined total	PM10
10.000	Lbs/Hr	12-month rolling average, Plant 1 combined total	VOC
12.100	Tons/Yr	12-months rolling basis	VOC
37.100	Tons/Yr	12-months rolling basis, Plant No. 1 combined total	VOC
240.000	Lbs/Day	12-month rolling average, Plant 1 combined total	VOC

101B PLANT 2, THREE STORAGE SILOS

Emission Limit			Pollutant
7.100	Tons/Yr	12-month rolling basis, combined Plant 2 total	PM10
1.060	Lbs/Hr		VOC
4.640	Tons/Yr	12-month rolling sum	VOC
24.300	Tons/Yr	12-month rolling basis, Plant 2 combined total	VOC

102A PLANT 1 POLYPROPYLENE MFG SOURCES

Emission Limit			Pollutant
7.100	Tons/Yr	12-months rolling basis, Plant No. 1 combined total	PM10
10.000	Lbs/Hr	12-month rolling average, Plant 1 combined total	VOC
37.100	Tons/Yr	12-months rolling basis, Plant No. 1 combined total	VOC
240.000	Lbs/Day	12-month rolling average, Plant 1 combined total	VOC

102B PLANT 2 POLYPROPYLENE MFG SOURCES

Emission Limit			Pollutant
7.100	Tons/Yr	12 month rolling - Plant 2 Combined Total PM and PM10	PM10
24.300	Tons/Yr	12-month rolling basis, Plant 2 combined Total	VOC

103A PLANT 1 FUGITIVE SOURCES

Emission Limit			Pollutant
7.100	Tons/Yr	12-months rolling basis, Plant No. 1 combined total	PM10
10.000	Lbs/Hr	12-month rolling average, Plant 1 combined total	VOC
19.600	Tons/Yr	12-month rolling basis, Plant 1 fugitive sources	VOC
37.100	Tons/Yr	12-months rolling basis, Plant No. 1 combined total	VOC
240.000	Lbs/Day	12-month rolling average, Plant 1 combined total	VOC

SECTION G. Emission Restriction Summary.

Source Id	Source Description
103B	PLANT 2 FUGITIVE SOURCES

Emission Limit			Pollutant
7.100	Tons/Yr	12-month rolling - Plant 2 Combined Total PM and PM10	PM10
24.300	Tons/Yr	12- month rolling - Plant 2 Combined Total	VOC

Site Emission Restriction Summary

Emission Limit	Pollutant

SECTION H. Miscellaneous.

The following previously issued Operating Permit serves as the basis for certain terms and conditions set forth in this Title V Permit:

RACT Operating Permit 23-0012

The Department has determined that the emissions from the following activities, excluding those indicated as site level requirements, in Section C of this permit, do not require limitations, monitoring or recordkeeping. The emissions from these sources must be included in the AIMS Emission Inventory report.

(i) Plant 1 Elutriator Baghouse Vent and associated Off-Spec Product Recovery Device (Source IDs C07A and S07A)
(ii) Plant 2 Elutriator Baghouse Vent and associated Off-Spec Product Recovery Device (Source IDs C07B and S07B)
(iii) Plant 1 Additive Blender Baghouse Vent and associated Additive Recovery Device (fabric collector) (Source IDs C05A and S05A)
(iv) Plant 1 Extruder Baghouse Vent and associated Resin/Additive Recovery Device (fabric collector) (Source IDs C06A and S06A)
(v) Plant 2 Additive Blender Baghouse Vent and associated Additive Recovery Device (fabric collector) (Source IDs C05B and S05B)
(vi) Plant 2 Extruder Baghouse Vent and associated Resin/Additive Recovery Device (fabric collector) C06B1 and C06B2 and S06B1 and S06B2)
(vii) Cooling Towers Circulation
(RFD #4496: One new cooling tower (CT-101))
(viii) Volcano Boiler - Source 104
(ix) Trace Erase Sampling System Purge Combustor and Trace Erase Vent (Source IDs C08 and S08)

1. This Title V Operating permit (APS No. 346739: Auth ID: 491234) has been administratively amended to incorporate the conditions from revised Plan Approval PA-23-0012 for the Polypropylene Plant 2 and three (3) silos.

2.APS: 346739 AUTH: 618152
Title V Operating Permit Renewal. The renewal will be issued under AUTH 784209 to include the transfer of Ownership

3. APS: 687816 AUTH: 784209
Transfer of Ownership. New Owner/Operator - Sunoco Chemicals

4. September 29, 2010: APS 346739; AUTH 855812:
Change name from Sunoco Chemical to Braskem PP Americas, Inc. and
Incorporate Plan Approval No. 23-0012A into TVOP 23-00012.

5. August 17, 2012: APS 687816, AUTH 939205.
(1) TVOP amendment to resolve issues in an appeal filed by the permittee on April 21, 2011;
(2) Change of Ownership from Braskem PP Americas, Inc. to Braskem America, Inc. received by the Department on September 20, 2011; and
(3) Request for TVOP Amendment received by the Department on August 17, 2012 to include sources purchased from Sunoco, Inc. R&M (23-00001).

6. August 20, 2013: APS 687816; Auth ID: 990594
TVOP amendment to resolve appeal issues.

7. July 18, 2013, (AUTH ID: 988783) OP renewal.

8. November 14, 2016, AUTH ID: 1160332; RACT II

9.May, 2018 AUTH ID: 1180710; TVOP amendment to incorporate Plan Approval No. 23-0012C.

The following changes have been made to the Plan Approval and Operating Permit with incorporation of the Plan Approval.
Changed Plan Approval Conditions
Plan Approval Conditions refer to the August 5, 2016 issuance of Plan Approval 23-0012C. Current condition numbers in the Operating Permit are shown in brackets [ ].

Section D

Source ID 101A Condition #001 [#002]

SECTION H. Miscellaneous.

Source ID 101B Condition #001 [#002]
These conditions indicate the PM restriction for the entire Plant 1 or for the entire Plant 2. For clarity, the three sources, comprising Plant 1 or 2 – the silos, the polypropylene manufacturing sources, and the fugitive sources – are identified in part [b], which was added to the conditions.

Source ID 101A Condition #005[#006]
Source ID 101B Condition #007[#008]
*In order to identify the source for emissions calculations procedures, the phrase “The emissions from this source shall be calculated using the methods specified in Braskem Marcus Hook Facility Expansion Project Emissions Summary, submitted by the permittee with Plan Approval No. 23-0012C, and approved by the Department herein” was included in the beginning of the condition.
*In order to allow some flexibility over the life of the project, the phrase “The permittee may revise the emission calculations upon notice to and approval of the Department” was added to the end of the condition.

Source ID 101A Condition #005(a)[#006(a)]
Source ID 101B Condition #007(a)[#008(a)
This condition specifies how the PM and PM10 emissions from the silos are to be calculated. For completeness, the polypropylene production and elutriador efficiency were added to the EPA factor already listed to be used in the calculation.

Source ID 101B Condition #009[#011)
This condition requires semiannual reports of changes in process operation that increase the uncontrolled annual emissions of VOC. Part (b) of the condition was removed since it gives the timing of the initial report, which has already been submitted.

Source ID 102A Condition #004 [#005 and #008]
Source ID 102B Condition #004 {#005 and #008]
These condition requires monitoring and recordkeeping of parameters used in emissions calculations. They were split into 2 separate conditions – one for monitoring and one for recordkeeping. “Exhaust air flow” was removed from the monitoring condition. The word “design” was added to part (a) of the recordkeeping condition specifying exhaust air flow. These changes were made for clarification purposes. The company uses the design exhaust flow in calculations but does not monitor or record the actual exhaust flow on a periodic basis.
*Parts (c) and (d) of the conditions pertaining to monitoring and recordkeeping of mass flow data and maintenance purge activities were combined and “engineering material balances” added, so that the combined condition reads [monitor and record] “data including mass flows, maintenance purge activities, or other engineering material balances necessary for emissions calculations.” The change was made since the company doesn’t monitor every parameter for every individual source.

Source ID 102A Condition #005 [#005 and #008]
Source ID 102B Condition #005 [#005 and #008]
These recordkeeping conditions for polypropylene production records were combined with Condition #004, of the Plan Approval, requiring monitoring and recordkeeping of various parameters, as described above.

Source ID 102A Condition #006(a)(3) [#007]
Source ID 102B Condition #006(a)(3) [#007]
These conditions describe calculation procedures for VOC and for PM and PM10. There are 2 parts to the PM and PM10 calculations - emissions from the elutriator baghouses and emissions from the manufacturing baghouses. Emissions from the manufacturing baghouses were presented in the plan approval application as being calculated from a historical emission factor whereas emissions calculations from the elutriador baghouses employ the design air flow and manufacturer guaranteed grain loading. For completeness, emissions calculations for the 2 sources of PM and PM10 are included in the condition.
*In order to identify the source for emissions calculations procedures, the phrase “The emissions from this source shall be calculated using the methods specified in Braskem Marcus Hook Facility Expansion Project Emissions Summary, submitted by the permittee with Plan Approval No. 23-0012C, and approved by the Department herein” was included in the beginning of the condition.

Source IDs 102A, 102B Condition #008(a)
Source IDs 106, 107 Condition #007
These conditions requiring a description of the new vents that could bypass the flare, including identification of those which are car sealed opened and which are car sealed closed, were deleted as DEP received the required description on April 20, 2018.

Source IDs 103A, 103B Condition #003 [#004(b), #003(b)]
Source ID 106 Condition #002[#003(b)]

SECTION H. Miscellaneous.

Source ID 107 Condition #002[#005(a)]
These conditions specify that monitoring of components is to be done in accordance with the LDAR program. Since the LDAR program encompasses the procedures of 40 CFR Part 60 Subpart VV, the phrase “LDAR Program” was changed to “40 CFR Part 60 Subpart VV.”

Source IDs 103A, 103B Condition #004 [#004(c), #003(c)]
Source ID 106 Condition #002[#003(c)]
Source ID 107 Condition #002[#005(b)]
These conditions specify that calculation of fugitive VOC emissions is to be done in accordance with the LDAR program. The condition was restated for clarity to “using procedures and criteria approved by the Department.”

Source IDs 103A, 103B, 106, 107 Condition #008
This condition, which required compliance with 40 CFR Sections 60.482-1 through-10 within 180 days of startup of the expanded plants, was deleted. The company has complied with the requirements and is continuing to do so through the requirements in the Operating Permit.

Source IDs 103A, 103B, 106, 107 Condition #009
This condition, requiring submission of a list of new components resulting from the expansion project, was deleted since the list was received by DEP on May 3, 2017.

Source ID 106 Condition #003(d)
Source ID 106 Condition #006(d)
These conditions required VOC emissions to be calculated using mass balances based on mass flow meter data. The conditions were deleted as emissions from the source are generally fugitive and component monitoring rather than a mass flow meter is used to calculate the emissions.

Changed Operating Permit Conditions
Condition numbers refer to the April 3, 2017 issuance. Current condition numbers in the Operating Permit are shown in brackets [ ].

Section C

Condition #002[#002]
This condition lists the exceptions to the fugitive emissions prohibition, as described by 25 Pa. Code Section 123.1. The condition was updated per current DEP guidelines to list all the sources listed in the regulation, so open burning (as defined by 25 Pa. Code Section 129.14), blasting in open pit mines, and coke oven batteries were included as exempt sources.

Condition #007[#007]
This condition identifies the exceptions to the no open burning regulation of 25 Pa. Code Section 129.14 (a). The wording was changed, in accordance with current DEP guidelines, to correspond exactly to 25 Pa. Code Section 129.14(c) whereby including all 7 exceptions to the open burning regulations, rather than the 3 identified.

Condition #010 [#010 (f)]
Condition #011 [#011 (c)]
These conditions specify monitoring and recordkeeping requirements for the facility.
Additional sub conditions were included referencing monitoring and recordkeeping requirements for data used in emissions calculations specified in Braskem Marcus Hook Facility Expansion Project Emissions Summary, submitted by the permittee with Plan Approval No. 23-0012C.

Condition #011[#011 (d)]
This condition required modified recordkeeping formats to be submitted to DEP within 60 days of permit issuance. The condition was deleted since modifications to recordkeeping formats were handled under the Plan Approval. An additional condition [e] is added in its place indicating that DEP approval is needed before any changes are made to recordkeeping formats.

Section D

Source ID 101A Condition #003 [#005]
Source ID 101B Condition #004 [#007]
These conditions specify monitoring and recordkeeping for polypropylene production and silo hours of operation. For clarity, and

SECTION H. Miscellaneous.

consistency with the Plan Approval, “loading” of the silo is indicated as the method for determining polypropylene production.

Source ID 101 A Condition #004 [#006]
Source ID 101 B Condition #005 [#008]
These conditions specify recordkeeping for the polypropylene production, silos hours of operation and VOC emissions. The emissions recordkeeping for VOC was removed and combined with the recordkeeping condition for PM and PM10 from the Plan Approval (Condition #005).

Source ID 101B, Condition #002 [#003]
Source ID 101B, Condition #003 [#004]
Source ID 102A, Condition #002 (a) [#003(a)]
Source ID 102B, Condition #003 (a) [#003(a)]
These conditions contain VOC emission limits or flare operating parameters for which compliance was demonstrated during a stack test in May 2017. However, since DEP’s Source Test Group is still reviewing the tests, a note is included with these conditions that additional testing may be required depending on the results of the Source Test Group’s review.

Source ID 102A Condition #003[004]
Source ID 102B Condition #004 [#004]
These conditions describe test procedures to be used to demonstrate compliance with 40 CFR Subpart DDD whenever there is a change in key parameters indicated such as in production capacity or addition or removal of a control device. The condition is combined with the protocol and report submission requirements in Conditions #003 of the Plan Approval.

Source ID 102A Condition #004[#005]
Source ID 102B Condition #005[#005]
These conditions require monitoring of polypropylene production and VOC emissions. They were combined with Condition #004 of the Plan Approval, which requires monitoring and recordkeeping of parameters used in emissions calculations.

Source ID 105, Condition #004[#004]
This condition lists documentation required of the permittee to identify the degreasing solvent supplier and solvent properties. Part (d) of the condition was updated to Safety Data Sheets (SDS), since the Material Safety Data Sheets (MSDS), originally listed in the condition are no longer produced.

Source ID 106, Conditions #003, #006 [#003, #006]
These conditions require monitoring and recordkeeping respectively for polypropylene production and VOC emissions. Monitoring and recordkeeping in accordance with 40 CFR Part 60 Subpart VV and procedures and criteria approved by the Department were added to the condition.

Source ID 106, Condition #008 [#008]
Source ID 107, Condition #009[10]
These conditions list recordkeeping requirements for vent systems that could divert the emission stream away from a control device. Recordkeeping for pilot flame conditions, production capacity changes were added from the Plan Approval Condition #005 to the existing requirements for valve maintenance. Also, the keeping of data for the Sunoco flare is stated as allowable to be kept by a third party, as specified in the Plan Approval Condition #005(d).

Source ID 107, Condition #004
For clarity, the condition was re-stated as “The permittee shall monitor and record the amount of material loaded and unloaded each month”.

Source ID 107 Condition #019 [#020]
Compressors, pumps, loading racks, product storage, knock out pots and associated equipment were added to the list of equipment comprising Source ID 107, from the upgrade authorized by RFD 6770.

Section F

PM and PM10 limits were added from the Plan Approval.

Section G

SECTION H. Miscellaneous.

(viii) Two cooling towers 15-2P and 15-2S were removed and replaced by cooling tower CT-101, as authorized by RFD 4496

10. February, 2020 APS No. 687816 AUTH 1256335
The Operating Permit is renewed;
RACT II is completed.

The following changes were made. Condition numbers refer to the May, 2018 issuance.Current condition numbers are in [brackets], where different.

Section A
The following name corrections were made:
Z03 Fugitive Emissions from Parts Washer rather than Degreaser
S07A's name was corrected by adding "Baghouse", as "Elutriator Baghouse Vent Stack (Plant 1)"
S07B's name was corrected by adding "Baghouse". As "Elutriator Baghouse Vent Stack (Plant 2)"

Section C
For clarity the following Facility wide conditions were revised to current DEP guidelines for standard conditions:
#003, pertaining to allowable fugitive emissions
#006, pertaining to visible emissions
#007, pertaining to open burning
#008, pertaining to DEP requested testing

Condiction Section C #012(b) was replaced with a generic, Commonwealth-wide malfunction reporting condition.

Condition #014 was removed since the reporting condition is now in Section B Condition #031.
Section D

Source ID 101A
Condition #002 - included Plant 1 total VOC emissions of 37.1 tons per 12-month rolling period.

Condition #003 -added part (b) to the condition containing the RACT limits of 10lb/hr and 240 lb/day as a 12-month rolling average for Plant 1.

Condition #005 - added part (b) to the condition, describing the 12-month rolling average calculation procedures for the RACT limits of 10 lb/hr and 240 lb/day as a 12-month rolling average for Plant No. 1.

Condition #006 - added part (d) to the condition for recordkeeping for the RACT limits of 10/hr and 240 lb/day.

Source ID 101B
#002 - included Plant 2 total VOC emissions limit of 24.3 tons per 12 month rolling period.

#006 [#006(c)]
A requirement was included that the short-term limit of 1.06 lb/hr be verified whenever VOC testing is conducted on the uncontrolled individual vent stream pursuant ot 40 CFR Section 60.564.

Additional testing condition [#007]
Current DEP Source Test Group's guidelines for test document submission was included.

Source ID 102A
Additional Restriction Condition [#002] - added the RACT limits of 10 lb/hr and 240 lb/day as a 12- month rolling average for Plant 1 along with the authority of 25 Pa. Section 129.99.

Condition #005 [#006]
Monitoring for the 10 lb/hr and 240 lb/day emission rates on a 12-month rolling average basis were added to the condition. The authority of RACT II (25 Pa. Section 129.99) was added.

SECTION H. Miscellaneous.

Condition #007 [#008]
Recordkeeping for the 10 lb/hr and 240 lb/day limits on a 12-month rolling average basis were added to the condition along with the authority of 25 Pa. Section 129.99.

Source ID 103A
Additional Restriction Condition [#003]
The additional restriction of 10 lb/hr and 24 lb/day for Plant 1, calculated as a 12-month rolling average, which serves as RACT, was added with the authority of 25 Pa. Code Section 129.99.

#004 [#005(d)], #007 [#008(b)(ii)
Monitoring and recordkeeping conditions for the RACT limit of 10 lb/hr and 240 lb/day were included.

Source ID 105
The parts washer was designated as a 81.8 Aqueous Parts Washer or equivalent. Cleaner usage was restricted to 5% VOC content or less. A condition was included that record be kept of the cleaner used, the VOC content and the vapor pressure at 68F. Conditions from 25 Pa. Code 129.63 were removed.

Source ID 108
Condition #002
Per the vacatur of the 2016 US Court of Appeals, the condition was revised to indicate that the engine be operated in accordance with the most recent verson of 40 CFR Section 63.6640(f) in effect.

Section F
Sources 101A, 101B - VOC limits of 37.1 tons/yr and 24.3 tons/year on a 12-month rolling basis for Plants 1 and 2 were included.
Sources 101A, 102A, 103A -RACT limits of 10 lb/hr and 240 lb/day on a 12-month rolling average basis were included.

Section G
*Insignificant sources were identified for clarify by including the Source ID.
* The following insignificant sources were added:
Trace Erase C-08 and S08
Elutriator Baghouse Vent Stack (Plant 1) S07A
Elutriator Baghouse Vent Stack (Plant 2) S07B

2023

AUTH ID 1421754 APS ID 687816- This action is a Significant Modification of the permit to address RACT III.

Applicable references to the requirements of 25 Pa. Code §§ 129.111-129.115, to demonstrate that RACT III is satisfied with compliance of applicable requirements of RACT II, were added.

Source ID 108, Section D Condition #002 added to demonstrate compliance to presumptive RACT.

Plant 1 combined emission limits and associated monitoring and recordkeeping requirements were moved to Section E, Group 1.

Responsible Official changed to Daryl Leggett, Facilities Manager.

****** End of Report ******